MAR 22 1926

PAPER TRADE JOURNAL

PAPER is Combined with Paper Trade Journal

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1851 75 Years of Growth 1926

Mr. Henry Graton (96 this year) says:

"This is our Diamond Jubilee. We are going to make it the best year of all the 75"

Alert and enthusiastic in his ninety-sixth year, Mr. Graton looks forward to greater opportunities for Graton & Knight in 1926 than ever before.

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Have you ever received a copy of the book "Standardized Leather Belting"? We'll gladly mail you one if you will let us know where to send it.

GRATON KNIGHT

DIAMOND JUBILEE

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Standardized

LEATHER BELTING

DIAMOND JUBILEE

Entered as second class matter August 13, 1895, at the Post Office at East Stroudsburg, Pa., under Act of Congress of March 3, 1879 — ESTABLISHED 1872 — FIFTY-FOURTH YEAR — Published every Thursday by the Lockwood Trade Journal Company, at 54 North Crystal St., East Stroudsburg, Pa.

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Some Interesting Facts Concerning the Noble & Wood Pulping Engine

The following are a few of the results which have been determined by actual test:

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On straight wood pulp furnish, 80% groundwood, 20% sulphite, a 1200 lb. engine thoroughly pulped the stock, ready for jordans, in 20 to 30 minutes.

Many other equally good records are available upon request.

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THE NOBLE & WOOD MACHINE CO., Hoosick Falls, N. Y.

ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

Vol. LXXXII, No. 11 — Thursday, March, 18, 1926

The Magazine of the Paper Industry

Paper Production Shows Gain In January

American Paper and Pulp Association Figures Show Increase of 3 Per Cent for the Month as Compared With the Corresponding Period Last Year—All Grades of Domestic Wood Pulp With Two Exceptions Also Show an Increased Production of 3 Per Cent for the Month —Output Compared in Statistical Summary

The January production of paper in the United States as reported by identical mills to the American Paper and Pulp Association and co-operating organizations, showed an increase of 3 per cent, as compared with December's production, following a 1 per cent increase in December over November, according to the association's monthly statistical summary of pulp and paper industry. All grades showed an increase in production as compared with December, with one exception.

The summary is prepared by the American Paper and Pulp Association as the central organization of the paper industry, in co-operation with the Binders' Board Manufacturers' Association, Converting Paper Mills Association, Cover Paper Association, News Print Service Bureau, Wrapping Paper Manufacturers' Service Bureau, Writing Paper Manufacturers' Association, and Paperboard Industries Association.

The figures for January for same mills as reported in December are:

Grade	Number of Mills	Production Net Tons	Shipments Net Tons	Stocks on Hand End of Month Net Tons
News print	66	139,777	138,779	16,312
Book	62	90,415	91,639	43,247
Paperboard	107	171,932	171,620	40,031
Wrapping	76	51,761	52,443	41,946
Bag	26	9,563	8,747	8,128
Fine	87	31,548	33,030	38,930
Tissue	45	12,951	12,927	12,457
Hanging	8	4,624	3,815	2,254
Felts	18	13,480	13,503	3,039
Other Grades	62	20,769	22,229	15,827
Total—All Grades		546,820	548,732	222,171

During the same period, domestic wood pulp production increased 3 per cent, this increase being distributed over all grades, with two exceptions. The January totals (mills identical with those reporting in December), as reported by the American Paper and Pulp Association, are as follows:

Grade	Number of Mills	Production Net Tons	Used Net Tons	Shipments Net Tons	Stocks on Hand End of Month Net Tons
Ground Wood Pulp	95	96,173	91,745	3,484	126,162
Sulphite News Grade	37	40,363	36,624	2,865	10,175
Sulphite Bleached	20	23,757	20,069	4,263	3,043
Sulphite Easy Bl.	6	3,922	3,214	559	1,070
Sulphite Mitscherlich	6	6,566	5,640	908	541
Sulphate Pulp	9	13,792	12,454	1,022	1,429
Soda Pulp	11	16,948	12,512	4,296	3,607
Other than Wood Pulp	2	90	39	62	45
Total—All Grades		201,611	182,297	17,459	146,072

New Mills Planned Will Cost $2,000,000

NEW WESTMINSTER, B. C., March 11, 1926.—Announcing that the initial expenditure will not be less than $2,000,000, and that eventually another $1,000,000 will be expended in the future on the plant, the Dominion National Consolidated Industries, Ltd., plans to commence within sixty days the establishment of a huge plant on Poplar Island. The establishment will comprise a sawmill, veneer mill, pulp mill and various other units.

About one thousand men are to be employed at this big plant at the start and 60 per cent of these will be skilled artisans. This number is expected to be considerably increased, however, as the business of the plant increases.

One of the first units will be a 100-ton pulp mill for the manufacture of bleached chemical pulp suitable for the production of rayon. This will be followed by other units.

The company has holdings of 1,300,000,000 feet of timber up north and has another 1,000,000,000 feet under option.

The members of the company are Messrs. J. Randall Black, a lumberman and financier of Edmonton and of Toulon, Inn.; George F. Whalen and John A. Whalen, who were stockholders in the Whalen Pulp and Paper Company, and Sumner M. Bump and J. W. Schoonover, California lumbermen. Mr. Bump is president, George S. Wahlen is vice-president, Mr. Schoonover secretary, and John A. Whalen will have charge of the logging end of the company's activities.

Mayor T. S. Annandale and F. J. Coulthard, C. A. Welsh, George Blakeley and W. B. English, members of the harbor board, and H. L. Edmonds are stated to be the men chiefly responsible for the location of the mill here.

To Introduce Electric Drive at Millinocket

The Great Northern Paper Company, one of the first paper companies to electrify the auxiliary equipment in its mills, is now to introduce electric drive for one of its paper machines at Millinocket, Maine.

The machinery is being manufactured by the Rice, Barton & Fales Company. The electric drive, which is of the sectional type will be of General Electric manufacture.

The installation will be made in the spring of 1926.

Paper and Pulp Exports From Norway

During the month of December, 20,800 metric tons of paper, 20,400 tons of chemical pulp, and 57,800 tons of mechanical ground wood were exported from Norway according to a cablegram received by the Paper Division of the Department of Commerce from Commercial Attache Sorenson at Copenhagen. The despatch says that approximately half of the paper exports consisted of news print.

Export Tax on Pulp Wood Proposed for Quebec

Measure Would Provide Power to Levy Tax of Ten Cents per Cord on Wood Cut Within Province For Home Manufacture of Paper and Pulp—Tax of Fifteen Per Cent Desired When Such Wood Is To Be Used for Manufacture Outside the Province

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., March 15, 1926.—What amounts to an export tax on pulpwood will be established by the Province of Quebec if a bill which is to be brought before the Legislature at the present session goes through. This bill, which will be sponsored by the Hon. A. David, on behalf of the Government, will provide, so it is learned, that the Lieutenant-Governor in Council shall have power to levy a tax of 10 cents per cord on wood cut in the Province when such wood is to be manufactured into paper or pulp within the Province, and that when such wood is used for manufacture outside the Province the tax is to be 15 cents per cord. It remains to be seen how this proposal will be regarded by the federal authorities. The net result, it is evident, will be an export tax of 5 cents per cord on the wood, over and above what may be called a royalty of 10 cents per cord on all the pulpwood cut. The amount is not large, but the principle involved is of fundamental importance, for if it is conceded that the Province has a right to put a tax, even of small amount, on products that are exported, then it can raise that tax so high, if it cares to do so, as to make exports prohibitive.

In the British North America Act, which constitutes the Constitution of the Dominion of Canada, it is stated (Section 91) that the exclusive legislative authority of the federal Parliament extends to all matters having to do with the regulation of trade and commerce. Therefore if the proposed tax is put on for the purpose of regulating or discouraging the export trade in pulpwood, apparently it would be unconstitutional.

The Act further limits the Province to direct taxation and the federal authorities to indirect taxation. Bourinot, who is an accepted authority on constitutional matters in Canada, says in his book, "How Canada Is Governed," that indirect taxation is taxation "such as that imposed on the goods brought into the country by merchants and traders, who alone pay the duties directly and add such charges to their expenses and necessary profits," the people paying indirectly. Direct taxation, on the other hand, is "taxation on everyone's property and collected from the great body of the people individually."

It is interesting to note that the Supreme Court of Canada has just disallowed a fuel oil tax of 1½ cents a gallon imposed by the British Columbia Legislature in 1923, on the ground that the tax is an indirect one, and therefore is *ultra vires* of the Provincial Legislature. This tax was imposed on imported oil, and the Court held it created a protective tariff and therefore savored of a customs duty.

A Tax on Water Power

In the same bill to be introduced in the Quebec Legislature are provisions to impose a tax of one-half of one per cent on the gross revenue of companies which develop electrical energy from the water powers of the Province held under title of the Crown. It is stated that companies which have to do with the development of water powers are not averse to the idea of a provincial tax. In fact, it is held that they welcome it, since it will mean that they will be spared a federal tax, and, as between being taxed by a financially strong government, with surpluses, and a federal government which has difficulty in making both ends meet, the choice naturally is for taxation by the Provincial Government.

Pulpwood Export to Other Provinces

Jules Langlais, member for Temisconata, speaking in the Provincial Legislature, said most of the pulpwood cut in the counties of Bonaventure and Temisconata went across the Baie de Chaleurs to be manufactured in New Brunswick, and he wondered whether it would not be possible to re-draft the leases with a provision that in the event of the wood being sent to other provinces the leases would terminate. If that were done, wood cut in the Province would be manufactured here.

The Hon. Mr. Mercier, Minister of Lands and Forests, said that no Chinese wall must be erected between the Provinces. To adopt the idea of an embargo between Provinces would lead to disastrous consequences. In the cases referred to the matter was one largely of transportation, and he hoped the transportation facilities of that section of the Province would soon be bettered, so that it would pay to manufacture the wood there instead of sending it to New Brunswick.

Big Artificial Silk Plant

Construction will start at Drummondville, Que., next month, of a $7,000,000 plant for the manufacture of artificial silk from wood pulp. This plant will be built by a company known as Canadian Celanese, Limited, of which Dr. Camille Dreyfus is president. Dr. Dreyfus is joint managing director with his brother of the British Celanese Company, and president of the American Cellulose and Chemical Manufacturing Company. The chairman of the Board of Directors is Geo. H. Whigham, who succeeded the late Sir William Van Horne as president of the Cuba Railroad Company. The entire plant will take two years to complete, but it will be in partial operation by the end of this year. The capacity will be three ton of artificial silk a day.

Abitibi Makes Good Showing

The annual financial statement of the Abitibi Power and Paper Company has just been issued. It shows earnings equal to $11.19 per share on the common stock, as compared with $10.95 in the previous year. Receipts for the year amounted to $10,364,677, as compared with $10,686,959 in 1924. Expenses amounted to $6,124,339, leaving net earnings at $4,240,337. Interest amounted to $611,420, depreciation was written off at $539,000, while appropriation for income taxes amounted to $220,000, leaving net profits at $2,869,916, as compared with $2,807,789 in 1924. Preferred dividends were paid to the amount of $70,000 and common dividends at $1,000,000, leaving a surplus of $1,799,916.

C. N. R. To Enter Three Rivers

A bill is before the Legislature which provides for the entry of the Canadian National Railway into Three Rivers, the chief center of the pulp and paper industry in this Province. Under the plans a new line would be built to connect with the C. N. R. at a point between Charest Mills and St. Justin. The Canadian Pacific main line between Montreal and Quebec now passes through Three Rivers.

Lumber Cut Short of Estimate

Owing to the late arrival of snow this winter, the season's lumber cut in the Province will not come up to expectations, according to G. C. Piche, provincial chief forester. The original estimate was for 1,500,000,000 feet. Some of the lumber camps are already closed, and it is expected that most of the remainder will be closed this week.

Paper Mills Get Tax Cut

The Provincial Government has confirmed an agreement by which the St. Regis Paper Company is granted a commutation of taxes for a period of 15 years on its projected mills at Cap Rouge, Que., which are to cost $5,000,000, and which are expected to be in operation in 1927. Until 1927 there will be a complete exemption from taxation. From that date until 1939 the company must pay taxes on a valuation of $250,000, increasing each year by $50,000.

MATHIESON Chemicals

Our Complete Chlorine Service

A DECISION of far-reaching benefit to the chlorine industry was the final ruling of the Interstate Commerce Commission on the Mathieson Multiple-Unit Tank Car.

This ruling has placed the Multiple-Unit Car permanently on a tank-car basis and has thus made available to manufacturers of Liquid Chlorine and other liquefied gases a flexible and economical means of maintaining shipping and storage reserves. It will permit the general extension of our practice of accurate weighing and frequent inspection which has proven so advantageous to the consumer; it assures the carriers of two methods of transporting liquefied gases in tank cars which may be expected to increase this traffic; and it has made liquefied chlorine gas available to the consumer in containers of four sizes, according to his requirements.

To-day the Mathieson Company owns and operates 120 of the special tank-cars required for transporting Liquid Chlorine, 75 of the multiple-unit type and 45 of the Class V or single-unit type, in addition to its equipment of many thousands of the two sizes of chlorine cylinders.

We thus offer, by reason of the Company's foresight and present resources, a complete service on Liquid Chlorine adapted to the consumer's varying needs and to all conditions of supply and demand.

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Bicarbonate of Soda
Anhydrous Ammonia
Soda Ash - Bleaching Powder
Modified Virginia Soda
Aqua Ammonia

Paper Demand Well Maintained In Toronto

February Showed Increased Paper Sales Over Same Period Last Year—Mills, However, Are Reported Not Quite As Busy As They Have Been—Toronto Carton Council Holds Second Annual Banquet at King Edward Hotel

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., March 15, 1926.—Business in the paper line has been keeping up well although the past week showed some falling off in orders which is attributed largely to the cold weather which has been prevailing. The month of February showed an increase over the corresponding period of last year with practically all jobbers. Mills continue busy but are not as rushed as they have been. There has been quite a slump in the rag market and prices have eased off considerably as a result. The paper stock demand is keeping up better although collections are light owing to weather conditions. Mills are not buying as heavily as they were. The collections are, however, sufficient to answer all present needs. Envelope producers are generally busy and paper box plants are rushed. Other lines maintain their usual level and there have been no recent price changes.

Carton Council Banquet

At the King Edward Hotel on March 9, the second annual banquet of the Toronto Carton Council and associate members of the bowling league took place. It was a fitting conclusion to a remarkably successful season. F. A. Fielder acceptably occupied the chair and a most enjoyable evening was spent in song, speech and story. Several members of the Canadian Paper Box Manufacturers Association were present as guests of the Toronto Carton Council. A hearty vote of thanks was tendered the committee composed of F. A. Fielder, A. B. Meredith, Monty Prescott and Arthur Allen.

"The Stayers" were winners in the league. The members of the team were Messrs. Jupp, Prescott, Brown, Hewitt and Fisher. A handsome cup was donated the victors by W. P. Bennett, of the Rudd Paper Box Company, while the individual players were given miniature cups emblematic of their ability. Prizes were donated by Paper Sales, Telfer Paper Box Company, Canadian-Nashua Company, Pollack Brothers, Ritchie & Ramsay, W. J. Bell, A. E. Long & Co., Fielder Paper Box Company, Canadian Paperboard Company, Dominion Envelope and Carton Company, Kilgour Brothers, J. L. Morrison Company, Lawrasan & Doughty, and several others. For making the highest scores, the following were winners: Messrs. Kernaghan, of A. E. Long & Co.; Hardman, of Kilgour Brothers; Morrison, of the Automatic Paper Box Company; Reid, of the Ontario Paper Box Company; Brodie, of A. E. Long & Co.; Thompson, of Harris Lithographing Company; Smith, of Harris Lithographing Company; Meredith, of Meredith-Simmons Company; T. J. Allen, of Paper Sales; Hutchison, of Dominion Envelope and Carton Company; Leake, of J. L. Morrison Company; Hewitt, of Paper Sales; Prescott, of A. E. Long & Co.; Harvey, of Lawrason & Doughty, and Hunt, of Kilgour Brothers.

Canadian Paper Products Organize

The Canadian Pulp Products Company, Limited, capitalized at $100,000, held its organization meeting in Hamilton, Ont., recently, when the following officers were elected: President, W. A. N. Woods; vice-president and manager, W. M. Cameron; secretary-treasurer, J. H. Pickett; directors, E. F. Clarke and R. E. Gunn. This company will operate in Toronto and manufacture various products, using waste paper as its raw material. Mr. Cameron, the manager, states that a satisfactory volume of local business is already on the books and the Australian and British market offers a wide field for their endeavors.

Activities of Backus-Brooks Co.

Extension of the Winnipeg river plant of the Backus-Brooks interests, with the expansion of another manufacturing plant at Kenora, Ont., and improvements at International Falls and Fort Frances, Ont., are foreshadowed in the announcement of the awarding of a contract for the construction of 110,000-volt transmission line, 110 miles long, from the Seine river to Fort Frances. The new line will cost $1,000,000, and the entire power of 32,000 k.w. will be transmitted to the plant. The projects are being financed by the $16,000,000 bond issue made last year.

Organize Northern Safety Group

A meeting of representatives of various pulp and paper mills in Northern Ontario was held at Port Arthur during the past week, at which A. G. Pounsford, of the Port Arthur branch of the Provincial Paper Mills, presided. It was decided to form a northern Safety group for the purpose of reducing the frequency and severity of accidents, adopting safeguards, exchanging information and data and keeping up to the mark in exchanging ideas and methods in regard to Safety work in general. Other Safety groups have been formed in Ontario with the same object in view through the cooperation of the Ontario Pulp and Paper Makers' Safety Association and A. P. Costigane, of Toronto, secretary-engineer of the Association.

Kapuskasing Is Booming Pulp Town

E. J. Yelle, who is Mayor of Kapuskasing, Ontario, which will be the most booming pulp and paper town in Ontario this season owing to the extensive construction work to be undertaken by the Spruce Falls Company, was in Toronto last week interviewing the Ontario government. He wants the provincial authorities to help with road building and to guarantee the debentures for the town so that it can build needed public buildings such as a town hall and other improvements.

Notes and Jottings of the Industry

Kilgour Bros., Toronto, made an interesting exhibit of cartons and paper bags at the convention of the Ontario Retail Merchants Association, held at the King Edward Hotel.

William H. Hough & Co., paper jobbers, have removed from 20 Front street East to 30 Front street East, where they have more commodious premises.

Fred L. Ratcliff, of the Ratcliff Paper Company, Toronto, and wife are spending a holiday at Atlantic City.

J. G. Gibson, secretary of the Spanish River Pulp and Paper Mills, Toronto, was in Kenogami, Que., last week, where he paid a visit to the plant of Price Bros. & Co.

Norman Hampshire, of J. C. Wilson, Limited, Montreal, was in Toronto lately calling upon the trade.

C. DeWolf Reid, of the Western Quebec Paper Mills, St. Andrews, East, Que., was a business visitor to Toronto during the past few days.

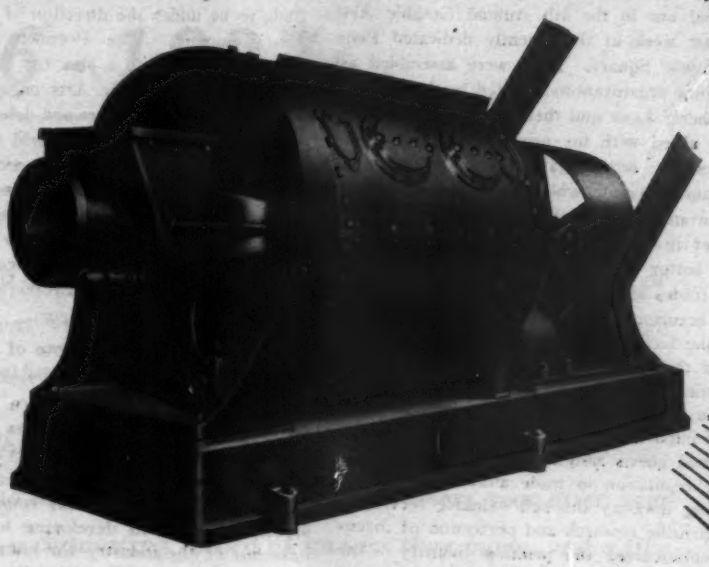
The many Toronto friends of William N. Hurlbut, who is a former resident of the city but for some years has been located at Dayton, Ohio, will congratulate him on his appointment to the presidency of the Manitoba Pulp and Paper Company, which is erecting a large pulp and paper mill at Fort Alexander, Manitoba.

T. J. Allen, of the sales staff of Paper Sales, Limited, Toronto, who was confined to his home by illness, is able to be around again.

Miss Vera McGregor, of the Montreal staff of the Howard Smith Paper Mills, is spending a few days in Toronto and is engaged in doing publicity work among the local customers of the firm.

The accounting and sales staffs of the Provincial Paper Mills, Toronto, are at present engaged in a lively contest at five pin bowling with the accountants leading by a good margin.

The Bird Pulp Screen



As good for pulp as the Bird Screen is for paper

Total power consumption including circulation of stock to deckers or wet machines is, in most lay-outs, less than 1 H.P. per ton.

Capacity is so tremendous that it replaces 2 or even 3 pulp screens of other types, saving an immense amount of valuable floor space in many mills.

Quality of output is in all cases maintained, in many cases improved.

Can you afford to go without the advantages that the Bird Pulp Screen brings to your screen room?

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Montreal, Canada

Annual Graphic Arts Night in Quaker City

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., March 22, 1926.—Another note was struck in the chord of harmony sounded now for several years at the annual fellowship gathering of the paper men with their allies in the printing industries, when the most representative of these yearly events was carried out in the 4th Annual Graphic Arts Night on Tuesday of last week at the recently dedicated Penn Athletic Club in Rittenhouse Square. Here were assembled all the associates of the leading organizations devoted to the Graphic Arts in the City of Brotherly Love and their honored guests and officials of organizations allied with the printing and paper distribution business. It was the largest gathering in point of attendance at any of these annual events, which originated four years ago, when the Typothetae and the Philadelphia Paper Trade Association decided to meet in yearly fellowing festivity for the purpose of promoting a better acquaintanceship and friendliness between the allies in the trades identified with the Graphic Arts.

In the handsome and luxurious quarters of the Penn Athletic Club, the stimulation of the feeling of kinship between the various industries assembled, and the good will of the participants, was most impressive—all joining hands in the spirit of revelry and honorary tribute to the accomplishments of those who have been leaders in development of importance to the industries represented. In the long row of honored guests assigned to the speakers table were men of nationwide reputation in trade annals and makers of history for the printing industry through valuable service in the accomplishment of scientific research and perfection of inventions that eventually revolutionized the printing industry. The various speakers stressed the importance of these inventions and their influences on the graphic arts industry down through the years and how greatly the world was indebted to these former associates of the Quaker City industry for the present attainments in the allied arts.

Banquet Features

Grouped about the handsomely designed banquet room of the Penn Athletic Club, in 'round table style, the members of the allied arts enjoyed a seasonal and tasty dinner and were entertained with a high class musical program of solos and chorus singing by professional talent, afterwards giving their attention to the various talks scheduled for the remainder of the evening.

With his 70 years of life sitting lightly on his shoulders, and still keenly alive to the modern interests of the printing art, the most exalted guest of the evening and the veteran inventor of the half tone and other improvements of note in the printing industry, was Frederic E. Ives, who in the course of the evening was presented with the Medal of Honor conferred by The United Typothetae of America. The Medal was awarded by the National President of the U. T. A. Ernest F. Eilert told of the pleasure of the associates in the U. T. A. in this recognizing at this date the wonderful achievements of the veteran inventor of the half tone who has been the recipient of twenty other medals from national and international scientific societies for various photo engraving processes.

Open House Hospitality

President Charles L. Kinsley, after making his address of welcome to the assembly, introduced the individual speakers, first calling on Paul Gibbons, chairman of the Typothetae Committee, and a member of the directorate of the Penn Athletic Club, who gave testimonial of the club's desire to provide open house hospitality for the graphic arts membership and invited all to inspect the numerous athletic facilities of the handsome structure after the meeting. Then turning to President Howard Story of the Poor Richard Club, the Philadelphia advertising men's organization, called on him for a word in behalf of his association. President Story laid before the allies in the industry the offer for enrollment of the printers salesmen in the proposed School for Direct Mail Advertising which will be opened on March 15 as part of the curriculum of the Charles Morris Price School of Advertising and Journalism connected with the Poor Richard Club, to be under the direction of Jack Lutz, of the W. B. Saunders Company. Vice President Rowe Stewart, of the Poor Richard Club, made a plea for the moral, physical and financial support of the Graphic Arts organizations and their membership in entertaining the visitors and delegates to the Associated National Advertising Clubs of the World Convention which will meet in annual session in this city the week of June 9. He told of the close ties uniting the advertising industries with the printing, paper and other allied trades, and stressed the importance of making the coming convention of the world's advertising fraternity, a means for boosting Philadelphia and a constructive factor for the better knowledge of the City of Brotherly Love and its industrial activities and civic accomplishments.

Harmony Keynote of President's Address

In his word of welcome, President Kinsley stressed the close harmony which existed between the various groups of trades identified with the Graphic Arts industry in Philadelphia. He pointed out the fact that the amity and spirit of co-operation which the paper men, printers, supply dealers and other members of the industry in Philadelphia was responsible for the good results of association work in developing high standards of ethics in all branches of the industry for mutual benefit of the organizations and the individuals. President Kinsley brought forth the information that the Philadelphia trade bore a nation-wide reputation for this harmonious blending of activities in its Graphic Art field and was a City of Brotherly Love, not only in name, but in its relations and associations in the industrial life of the allied trades.

George W. Ward Spokesman For Paper Trade

Sentiments expressive of the cordial relationship existing between the paper men and their allies in the consuming trades were sounded in the theme of the brief address of George W. Ward, of the D. L. Ward Company, who substituted as spokesman for President Morgan H. Thomas, of the Philadelphia Paper Trade Association, who was unable to attend owing to illness in his family. After reading a telegram from President Thomas conveying his regrets over his unavoidable absence, Mr. Ward, in turn paid tribute to the various associates on the entertainment committees and to the honorary guests and officials of the organizations represented in the Graphic Arts Night assembly. On behalf of the Paper Trade Association he thanked the Directors of the Club through Paul W. Gibbon who extended the greetings of the paper men to President Kinsley of the Typothetae and expressed his admiration and that of the paper associates for the hearty co-operation of the master printers throughout the year and for the comprehensive and constructive program it had planned for the coming season, and in like vein complimented the Poor Richard Club through its President, Howard Story, and Vice Presidents, Norbert A. Considine and Rowe Stewart, for their achievements in Direct Mail Advertising and the stimulation of interests in the printing arts generally. He pledged the support of the paper men for the coming convention of the Associated Advertising Clubs of the World when it meets here next June.

A word of gratitude was included for the associates on the Paper Trade Committee of the Graphic Arts Night Banquet and was happily extended to President Norbert A. Considine, of the Paper House of Pennsylvania, and to David Lindsay, Jr., of Lindsay Brothers, for the zeal with which they labored for the success of the entertainment. In his expressions of the sentiments

Established 1886
OUR 40TH YEAR

1926-1927

To confer with us before you buy your pulp for this or next year will cost you nothing. To buy elsewhere without first consulting us may cost you a lot.

The names of many of the largest paper-makers appearing on our books as contract customers year after year is a convincing record of savings they made, and a like service awaits you in Bleached or Unbleached Sulphite, Kraft and Groundwood Pulp.

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developed among the trades through the annual Graphic Arts Night, he told of the amity and goodfellowship which the social meeting stimulated among the associates in the various branches of the industry and that this social contact was further developed throughout the year in the business relationship. He hoped President Eilert of the U. T. A. would convey this spirit of friendly cooperation back to the associates of the organization he represented and that it would accomplish for the national body of master printers what it had for the members of the local association, and assured him that the paper men were cheerfully working hand in hand for the mutual interests of the industry as a whole.

President Eilert Tells Trade Extent

President Eilert outlined the work of the paper and printing industries in the United States stating that the combined trades were the third largest in the country and so important a commercial enterprise carried vast important interests not only to the nation but to the world at large. Its co-operative methods and the friendly contact of its business and social features, he asserted, were examples worthy of emulation by other large industries.

William Innes Lauds F. C. Ives

William Innes, one of the most interesting speakers of the evening, told of the achievements of the honorary veteran and scientific inventor, Frederic E. Ives, and his development of the photo engraving processes, going into detail from the time of the perfection of the first half tone plate and its use by the Government down to the present day photogravure methods of pictorial illustration.

W. C. Ridgeway a Guest

Among the honored guests who occupied the row at the speakers table were W. C. Ridgeway, secretary of the National Paper Trade Association, who was specially invited by the Philadelphia paper men to attend the gathering, Norbert A. Considine, and David Lindsay, Jr. At the invitation of Mr. Considine, John Randolph Smith gave a terse account of what had been accomplished by his firm of awning and canvas goods manufacturers through advertising, outlining the marvelous results obtained by persistent campaigning along these lines.

Paper Dealers Attending Banquet

Another out of town guest was Roger B. Taft, general manager of the Hammermill Paper Company, who journeyed here from the New York offices to attend the Graphic Arts celebration. P. H. Glatfelter, of Spring Grove, Pa., was among the manufacturers represented.

These were included among the paper men attending: Albert H. Anderson, James Andrews, J. W. Andrews, V. A. Arndt, Harry M. Bailey, Frank J. Barthmaier, D. M. Bauer, Leon Beck, Raymond Beck, J. S. Brock, Alvah Bushnell, George Cadwell, John Carey, M. K. Christine, A. J. Collins, Miss A. M. Collins, E. H. Collins, Clyde B. Cobaugh, Charles A. Connell, Morton B. Connolly, H. J. Considine, R. J. Considine, T. A. Convery, J. P. Cooper, D. F. C. Coots, W. E. Cox, Thomas J. Curry, John A. Datz, A. C. Davis, H. F. Donahue, William Dorsey, J. P. Dougherty, D. Lindsay Evan, Norman W. Fort, J. O. Franz, Irwin N. Furlong, Thomas S. Furlong, M. A. Gibbs, P. H. Glatfelter, A. R. Hartung, E. W. Hartung, Harvey Hearl, F. W. Hastings, J. R. Hathaway, William H. Hentz, D. Heverly, J. Heverly, George W. Haworth, John R. Howarth, Howard Hurlock, Frank D. Jacobs, Fred Kurtz, W. L. Lloyd, Edward McCorkendale, James McCracken, James McNutt, Howard Marcus, Charles P. Mahoney, H. A. Medholt, Irwin F. Megargee, Louis S. Megargee, Earl Miller, Joseph H. Miller, John K. Mohr, F. J. O'Brien, C. H. O'Neill, Leonard A. Peck, Raymond W. Platt, W. Predmore, J. Evan Reese, Anthony Richie, H. S. Rossiter, R. J. Ross, George Rittinger, Albert Schoenbucher, Joseph Schwartz, Frank Seltzer, Thomas E. Sheehan, E. D. Shepherd, A. B. Sherrill, Howard Shoemaker, Harold Simon, Harry Sloan, William Snowden, L. F. Supple, George B. Taylor, George C. Taylor, Edward T. Walter, George W. Weaver, J. S. Weaver, A. E. Whiting, C. M. Wiker, William S. Wilcox, Charles Wilhelm, Miss C. A. Wood and George Zinger.

News of the Wisconsin Industry

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., March 15, 1926.—The Chippewa Paper Box Company, of Chippewa Falls, Wis., will move to Eau Claire soon, according to Charles Blackwell, manager. Mr. Blackwell expressed regret over the change, but said that business conditions warranted this move. The old toy factory building in Eau Claire will be the new home of the industry. It is spacious and arranged with accommodations for manufacturing, with a railroad spur running to the doorway. A demand among shoe factories for folding boxes which are rapidly taking the place of the old fashioned shoe box will require the installation of new machinery, Mr. Blackwell said. Latest machinery for printing and labeling will be required, and the company has made a selection of the new equipment needed. A two years' lease with an option to purchase has been taken on the toy factory property. Eau Claire factories have made the removal possible by guaranteeing their support. Manufacturers and business men using paper boxes and who have heretofore sent their business away from Eau Claire will patronize the industry and provide a sufficient amount of business to keep the plant busy the year round with an additional force of employes, Mr. Blackwell said.

"Safety With a Smile" was the subject of an address delivered by William J. Peacock, safety director of the Northern Paper Mills, of Green Bay, to the Kiwanis club of that city. He told how the safety movement started in various sections of the country and what is being done in the mills today to prevent accidents.

Gustave Klaus, engineer of the Northern Paper Mills, recently gave a talk before the Green Bay Lions club on the making of paper. Interesting facts and figures concerning the makeup of a sheet of paper were brought and very clever demonstrations were presented to illustrate intricate points in his talk. He also talked on what the mills are doing to solve the pollution problems.

Walter Chamberlain, former master mechanic of Peshtigo Paper Company, Peshtigo, Mrs. Chamberlain and family, have moved to Escanaba, where Mr. Chamberlain has accepted a similar position in a paper mill.

Rosin Producers Appear for Bill

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 17, 1926.—C. F. Spea, secretary of the Rosin and Turpentine Producers Association of New Orleans, La., appeared before the Senate Committee on Agriculture last Saturday, in connection with the Haugen cooperative marketing bill.

Mr. Spea asked the committee that the words "and naval stores" be left in the bill as it passed the House and he argued that this would not exempt the naval stores industry from the provisions of the Sherman law. He denied that his industry is trying to hide behind the skirts of the farmers to get this legislation through. He was confronted with many communications from users of the product against the inclusion of the words in the bill but he took the attitude that the users did not understand the situation. He contended that the naval stores industry is carried on by about 1500 small producers.

Martins-Currie Paper Co. Formed

JACKSON, Tenn., March 15, 1926.—The Martins-Currie Paper Company has been organized here with capital stock of $50,000.

The officers are as follows: A. J. Stegall, president; W. G. Currie, vice-president and A. H. Martins, secretary-treasurer. Five salesmen will be kept on the road by the local house, and West Tennessee, Northern Mississippi and Western Kentucky will be served. Both Mr. Currie and Mr. Martins have been connected with the Taylor Paper Company in Memphis for many years, and are well known to the paper trade. They recently returned to Jackson from an extensive tour of Canadian and eastern paper mills, where a large stock was bought for the opening here.

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Philadelphia Waste Merchants Banquet

In a spirit of revelry and jollification the members of the Philadelphia Wholesale Waste Merchants Association united with their out of town guests at the Second Annual Banquet held last week in the Hotel Benjamin Franklin. Without any attempt at formality, the evening of March 11, when the social event of the combined waste trades was held, was perhaps the most enjoyable of all times, and in point of attendance a record breaker. There were 350 associates of the various branches of the wholesale waste industry, including the paper stock, rag, rubber and other waste materials divisions, with their guests grouped at tables assigned by the committee in charge of entertainments to specially arranged assemblies of the local dealers and their trade associates from out of town. The program, an elaborate diversified entertainment, was carried out from six o'clock in the evening until the wee small hours of the morning.

Tribute to Evan G. Badger

A silent minute was given to the memory of one who, but recently departed, was the inspiration for the foundation of this fellowship gathering and whose zeal and untiring effort was responsible for the organization of the Philadelphia industry into the present association. It was a fitting tribute to the man who for more than 15 years ruled the Philadelphia Paper Stock Dealers Association and later the present combined Wholesale Waste Merchants Association, an outgrowth of the former, as president. That departed spirit whose living hand had guided the destinies of the Philadelphia association for so many years, was the late Evan G. Badger, whose passing took place in late January. When the newly elected president, Thomas A. Kenny, in his address of welcome, announced the passing of the former chief executive, and in brief but sorrowful words of regret, spoke of the loss which the trade bore in his demise, a reverential hush passed over the assembled guests, many of whom had in former years joined in celebrating these annual social functions under the direction of the genial and cheerful philosopher whose jovial personality was the inspiration for many happy moments in the annual banquets of other years.

President Kenny's Welcome

When the waste merchants and their guests from the mill ranks had partaken of a well served and seasonable menu, President Kenny mounted the platform and voiced the hearty welcome of the Association membership and after introducing the chairman of the entertainment committee, Harry M. Bailey, of the Hemingway Company, and his associates, Edwin I. Orr, of Infante Brothers, and the other officers and members of the co-operating committees in the evening's program, turned the meeting over to their hands. These were among the other committees: Executive, Edwin I. Orr, Anthony Massington, Louis Bantivoglio, John A. Murphy and Samuel E. Ingber; Reception, Isaac Beitchman, Wm. Burleigh, Thos. Chadwick, Edward Corner, Peter Di Biaso, Geo. A. Di Ienno, Peter De Santi, Dominic De Santi, H. Feldman, James Flannery, George Frenck, John Higgins, John Infante, Louis Infante, Peter Infante, Wm. P. Kelly, Max Leese, Wm. Lemly, Abe Matusow, S. Maxman, John McBlaine, Wm. J. McGarity, Jr., John Mullin, John M. O'Neil, M. Oliver Raiguel, Harry Rose, Emil Schwab, Thos. F. Simmons, Edward Sobel, Sam Spector, A. Strouse, P. Sullivan, Chas. Swanson.

New Officers

The new officers whose election was announced at the gathering were, besides President Kenny, Vice President Charles J. McNichol, P. De Sante and Company; Treasurer, William L. Simmons, John Simmons Sons; and William J. McGarity, Sr., the Penn Paper and Stock Company.

Among the representatives of the mills were paper manufacturers from all the important centers, including New York, Boston, Baltimore, Richmond, Washington, Holyoke, Chicago, and other paper making districts in the East, including the local territory, who were the recipients of the hospitality of their Philadelphia associates in the waste trade. There were more than 200 invited guests from the paper manufacturing branch and the wholesale waste industries in the New England and eastern states who joined with their Quaker City allies in celebrating this second annual event of the combined branches of the waste trade and the twenty-first annual banquet of the original Philadelphia Paper Stock Dealers Association, from which the present organization sprang.

Informal Program

The programs of other years always provided for discussions by prominent speakers selected from trade circles and those outside who might bear messages of interest to the attendants. This year's event was a departure from the old custom in that it provided for but a single address and that only of a word of welcome from the newly elected president and the special tribute to the late President Badger, with a benediction just before the service of the dinner. The benediction was bestowed by Edward Corner, who represented the rope and canvas division of the trade. Owing to the death of a brother, Louis Bantivoglio, of the Camden Paper Company, Camden, N. J., who was a few weeks ago elected to the executive committee, was unable to be present.

Before closing the program for the evening, President Kenny expressed a word of appreciation to the entertainment committee and those on the reception committee for the many novel features of the program and the successful carrying out of one of the most delightful affairs ever held in any social meetings of the Association.

Two New Paper Firms Formed in Boston

[FROM OUR REGULAR CORRESPONDENT]

Boston, Mass., March 15, 1926.—Termination of the partnership of Massey & Hurlburt, well known paper and twine firm, has been announced. Both Mr. Hurlburt and Mr. Massey are very well known to the New England trade having been for several years on the road for Stone & Forsythe, paper merchants. Six years ago they left the latter firm and formed the firm that has just been dissolved. They have built up a large following and always have had a high standing in the trade. Mr. Hurlburt states that he has purchased all the interests, and assets of the firm and has assumed all of the obligations. He has taken as a partner Mr. Allan I. Hatfield, also well known in the trade. The new firm is known as Hurlburt & Hatfield. The firm stays at the old stand, Atlantic avenue.

Mr. Massey has formed a partnership with "Jack" Wendell well known Harvard football star and equally well known in the paper trade. They have established the firm of Massey & Wendell at 110 High street. They will deal in paper and twine.

Goes With Albemarle Paper Mfg. Co.

Gösta Hall, the recipient of a scholarship of the Royal Swedish Institute, who has been engaged in studies of the permanency of paper for the Swedish Government, and who had come to the United States to continue them at the Bureau of Standards and the Forest Products Laboratory, has accepted a position with Albemarle Paper Manufacturing Company, Richmond, Va., in its technical department.

For the past six months Mr. Hall has been with American Writing Paper Company and has recently returned from Sweden with his bride who is a daughter of Dr. Carl Oscar Olin, first physician to the King of Sweden.

At the recent Convention of the Technical Association Mr. Hall gave an address covering the results of his studies on the permanency of paper, which was received with interest.

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All will be sold quickly at sacrificed price.

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DAYTON OHIO

Year of Progress for the Wisconsin Paper Mills

By John R. Reid

The year 1925 was unmarked by any sensational or revolutionary occurrences in the paper industry of Wisconsin, but the wheels of progress are running steadily. It was a year of comparative stability, with production, aided by more favorable prices, showing an improvement over the year previous. An optimistic tone prevails in the industry as the new year is gathering momentum from the volume developed during the closing months of 1925.

Progress was unmistakably evident from the large volume of construction during the past year. Although no new mills came into existence in the state, there were numerous additions to plants, and many concerns increased the efficiency of their mills by the installation of modern machinery and other equipment.

Total Failures Unknown

Total failures were unknown, although two Wisconsin paper mills are even now in a state of receivership with good prospects, however, of weathering the storm and sailing again in clear waters. Paper mills of the state also were spared losses through serious fires or other disasters. Neither were they hampered by any marked amount of oppressive legislation. Recent efforts on the part of the state railroad and conservation commissions directed against stream pollution by paper mills are being carried with a degree of caution and in a more or less friendly spirit that seems to understand some of the problems of the industry. The concerns here are greatly encouraged by the tendency of Congress toward reduction of income taxes and are looking forward to an improvement in tariff laws affecting pulp and paper.

River navigation is beginning to mean less and less to the paper industry, but the waterpower of those streams is still a potent factor of operation. Last year, however, saw the rivers of the state unusually low, which meant an increase in the cost of production.

One paper mill of the state ceased operations during the year. This was the Ashland plant of the Flambeau Paper Company, of Park Falls. The company dismantled its Ashland plant and concentrated upon the improvement of the Park Falls mill.

Changes in Ownership

Two mills changed ownership in the year past. One of these is the Ashland Paper Company which has come into the possession of the Menasha Printing and Carton Company, of Menasha, after it had previously passed to a Chicago firm via the bankruptcy route. From a failing mill it is now being put on a sound business basis. It is known as the Lake Superior Paper Company, and serves as a subsidiary to the Menasha plant, providing that concern with paper material for its printing department. More than $100,000 has been spent on improvements. This, however, is only a step in the program of steady expansion which is to extend over a period of several years. Machines in the plant were considerably overhauled and other equipment was installed in order to fit it for its future purpose. One of the machines is to be operated for the manufacture of bread wrappers for shipment to Menasha where they will be printed in the huge printing department of the concern. Another machine is to be used in the manufacture of napkin paper which is cut down to size ready for use.

The other mill that changed ownership in 1925 was the American Tablet Company, of Green Bay, which has come into the hands of interests that control the Western Tablet Company, of St. Joseph, Mo., and the Miami Tablet Company of West Carrollton, Ohio. New improvements in the way of rearrangement of machinery and the addition of new machines also followed this reorganization. With new capital in the concern, and being linked up with the large plants in Missouri and Ohio, the Green Bay mill is looking into a future that is unusually bright.

The concern is now known as the American Tablet and Stationery Company. Several of the managing heads have been retained and a number of the old stockholders are also staying with the new organization. Officers of the company are: President, W. Albrecht, St. Joseph, who is also head of the tablet company of that city and of the West Carrollton plant; vice president, W. W. Sunderland, West Carrollton; secretary, W. J. Bertrand, Green Bay; assistant secretary, B. L. Parker, Green Bay; treasurer, M. Forberg, Green Bay. Mr. Forberg who was sales manager in the old concern has been placed in charge as general manager since the reorganization. The advantage in freight rates which the Green Bay plant enjoys over the other two plants in this section of the middle west, is expected to result in a transfer of some of the business from the St. Joseph and West Carrollton mills. It is planned to have about 150 employes at work by the middle of the year.

New Establishments

Two infant plants, both established by one and the same capital, have been added to the pulp and paper industry of this state. They are located at De Pere and are the De Pere Pulp and Paper Company, which took over a flour mill to be converted into a pulp mill, and the De Pere Paper Manufacturing Company, which took over a boiler plant for conversion into a paper mill. Those associated in the operation of the two mills are Maurice Miller, Herman Miller and John Miller, of Green Bay. The first mentioned has been engaged in the wholesale paper business in Menasha. Installation of machinery has been taking place within the last few months, and recently the paper mill turned out its first product. It was a sample of wrapping paper. It is not yet on a production basis, however. Manufacture of crepe paper, toweling and toilet paper will be undertaken principally. A rather small force of workmen will be employed at the start. Pulp will be furnished by the sister plant, the De Pere Pulp and Paper Company pulp mill.

Old Paper Mills Pass From the Scene

The year marked the passing of an old landmark in the Wisconsin paper industry and in the city of Neenah through the dismantling of the old historic Winnebago Mill of the Bergstrom Paper Company, of Neenah. This was at one time owned by Davis Brothers and was one of the very oldest paper mills of the Fox River Valley.

Another old historic mill in another section of Neenah is about to "give up the ghost." The old stone mill, built as a flour mill in 1867, and later acquired by the Neenah Paper Company, is doomed to be dismantled and give way to a modern office building. Plans for this project were in preparation all last year and now are completed.

Concerns in Receivership

Among the concerns that had rather hard sledding in the past year were the Peshtigo Paper Company, of Peshtigo, and the Island Paper Company, of Menasha. Both are in a state of receivership.

The Peshtigo mill is in operation, however, under the general supervision of the receiver, John D. Bird, president of the American National Bank, of Milwaukee. Several meetings of creditors and stockholders were held last year in an effort to put the concern again on a firm footing.

As to the Island Paper Company, no determination has as yet been arrived at whether to sell the plant or whether to continue operations. Hugh Strange of the John Strange Paper Company, also of Menasha, is the receiver for the company. At the time of the application for receivership in the action brought against the company by the Kaukauna Ground Wood Pulp Company, of Kaukauna, one of the creditors, the total indebtedness of the firm was listed at $230,000, while the current assets consisted of

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$50,000, the physical assets being the paper mill, machinery and manufactured stock. There also was a certain amount of accounts receivable. The company had an authorized capitalization of $300,000, and gross sales for the past few years aggregated about $700,000.

The American Writing Paper Company, which operates a plant at De Pere—the Shattuck & Babcock division—also is still in a state of receivership, as is generally known, but according to the last report of the receiver, the finances are in better condition than they were last year. The De Pere plant was operating steadily during the closing months of the past year and was employing about 120 men.

The Passing of Prominent Paper Men

There were but few changes in personnel during the year just passed. The paper industry, however, lost a well known manufacturer in the person of James H. Delbridge, of Marinette, who was president of the Marinette and Menominee Paper Company of that city and the Falls Manufacturing Company, of Oconto Falls.

Mr. Delbridge died suddenly at a Green Bay hospital on November 18, following an attack of heart disease with which he had been troubled for some time. He had been identified with the paper industry for about thirty-seven years, he having been engaged in this business first in a paper mill in Kaukauna with N. H. Brokaw, later in Oconto Falls and finally in Marinette where in 1920 he became the executive head of the Marinette and Menominee Paper Company, a subsidiary of the Continental Bag and Paper Mills Corporation. He was only 57 at his death.

The new year also sees the passing of one of the pioneers in the paper industry of Wisconsin. William M. Gilbert, who died at the beginning of the year, was president of the Gilbert Paper Company, of Menasha, and had been engaged in paper manufacture in this state for about forty-three years.

Born on July 25, 1852, in Philadelphia, he came to Chicago in the 70's and there with his father engaged in the wholesale paper business. But in 1883 he, together with George A. Whiting, founded the Gilbert-Whiting Paper Company. Partnership was dissolved, however, and Mr. Whiting continued in business for himself. Mr. Gilbert then organized the Gilbert Paper Company, of which he was president since 1897. His father and three brothers were associated with him at the time. He was the originator of writing paper made from a mixture of wood and rag fiber.

The late Menasha paper manufacturer is now succeeded in the presidency of the Gilbert Paper Company by Albert M. Gilbert, his son. At the annual meeting shortly after the elder Gilbert's death, A. M. Gilbert took his father's place as director and president.

The passing of Mr. Gilbert followed somewhat closely the death of Mr. Gilbert's paper mill superintendent, Joseph E. Hill. He died on October 24 at the age of sixty-seven years. He had had a very colorful career. He was born in Trenton, N. J., served in his early life with Custer in the South Dakota campaign, was a railroad engineer, a lumber executive, and later mayor of Menasha for several terms. He was associated with the Gilbert Paper Company for twenty-seven years.

Last summer another paper mill superintendent from the same city passed away. He was W. A. Ferguson who was employed in that capacity by the George A. Whiting Company. The mill was shut down for a half day on the day of his funeral out of respect to the official.

The assistant superintendent of the Outagamie Paper Company, of Kaukauna, Charles Block, died on November 30 at the age of fifty-one years. He had been an employee of that concern for thirty-five years and its assistant superintendent twelve years.

Changes in Personnel

Among other vacancies made was that through the resignation of Ernest G. Timme as superintendent of the Fox River Paper Company, of Appleton, at the close of the year. Mr. Timme was superintendent here for nearly six years. Although he was born in Kaukauna, he came to Appleton from the east. He was superintendent of the Monadnock Paper Company, of Bennington, Vermont. He expects to reengage in the work after he has taken a rest.

A promotion was granted last fall to Nels Rassmussen from tour boss of the Niagara Falls mill of the Kimberly-Clark Company to superintendent of the Niagara mill. He has worked for the company twelve years and is the son of a veteran of thirty-five years' service.

At the American Writing Paper plant at De Pere Ray D. Terrien was in December promoted to assistant to Charles E. Garvin, superintendent and manager.

A change back to former management went into effect at the Rhinelander Paper Company, of Rhinelander, at the beginning of the year. William Eibel, who was manager of the company for a long time but has been away for several years, is again filling that office as successor to H. C. Hanke.

Kimberly-Clark Co. Improvements

The most extensive improvements last year in the way of new construction and equipment were made by the Kimberly-Clark Company, of Neenah. Expansion has been taking place in practically all of its mills and the mills it controls, including the plants at Neenah, Appleton, Kimberly, Niagara, Wis., Niagara Falls, Spruce Falls, Kapuskasing, and the plant of the Neenah Paper Company, in Neenah.

Its largest construction projects of the past year have been at Neenah. There the company has completed the erection and equipment of two spacious warehouses, one a four-story building, 80 x 90 feet, (with basement), and the other a six-story building, about 140 by 50 feet in size.

The one was built on the site of what was once the steam power plant which was dismantled since the company already had adequate facilities elsewhere. The other building besides providing more storage space for manufactured stock, especially Cellucotton products, also gives the company room for the overflow of the main office building and furnishes office quarters for the chief engineer and his staff. Both plants are of brick, reenforced concrete and steel, and were constructed by the C. R. Meyer & Sons Company, of Oshkosh, which has done considerable paper mill construction in Wisconsin.

Site Sold to Neenah Paper Co.

Last year an old laboratory of the Kimberly-Clark Company in Neenah was dismantled, and the site was sold to the Neenah Paper Company, which the former concern controls. The basement will be filled in and made into a park for the new office building which the Neenah Paper Company will build immediately adjoining it. Plans for that structure were completed last year and construction will be undertaken shortly after the dismantling of an old stone building.

Another large project completed by the Kimberly-Clark Company was that of rebuilding the hydro-electric power plant at Kimberly, which had been in use there for 25 years or more. All the equipment was removed and new installed at no small expense. The understructure of the power plant was rebuilt. Three big turbines were installed. The plant is considered one of the most modern low head installations of the country.

Two paper machines of the Niagara mill of the Kimberly-Clark Company were entirely rebuilt and modernized in order to increase the capacity of the mill. The mill was closed for several weeks while the construction was on

Construction work at the Atlas mill in Appleton consists of a new two-story warehouse, 95 by 53 feet in size, erected of brick, re-enforced concrete and steel, by Meyer & Sons. Expansion in the Cellucotton Products mill at Niagara Falls also has been steady so that more machines are in operation and more help is being employed than formerly.

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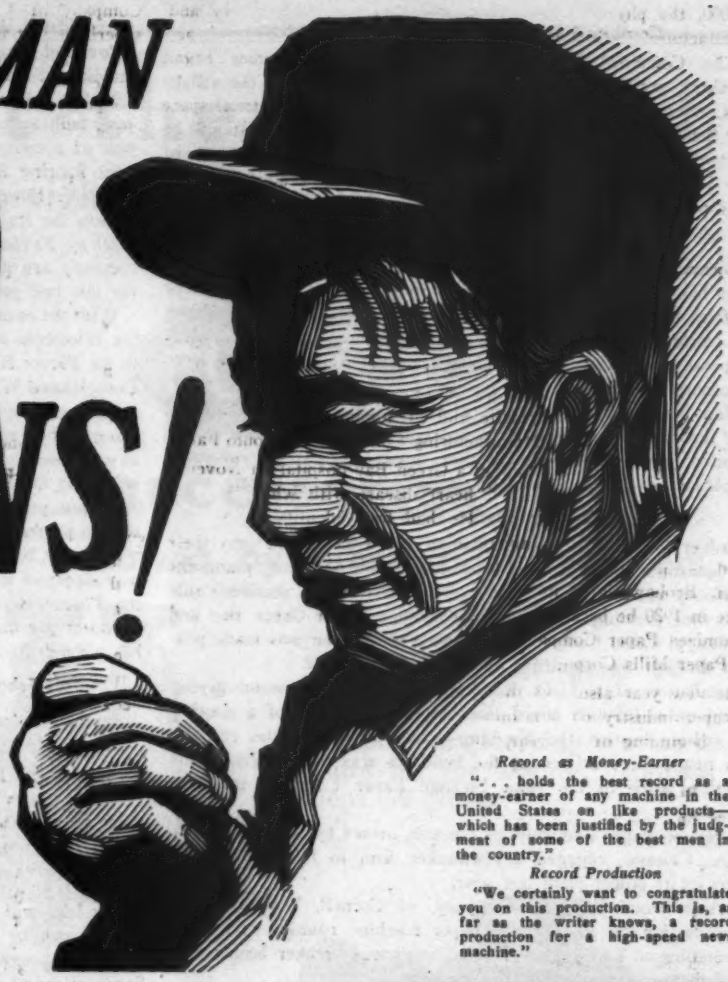

The "Super" is only too often the "goat" in many paper mills. He is blamed for lost time, for high costs, for loss in production, for most every ill to which manufacturing is heir. Yet, in how many cases, is the fault, not with the "Super," but with the equipment with which he has to work?

For example, every wire change on the old type of Fourdrinier means an average loss in time and labor of 35 man hours and in production of tons of paper, over the new removable method available to those plants equipped with the modern NEW BELOIT FOURDRINIER. Moreover, wire life is prolonged so that fewer changes are necessary.

It will pay you to talk to superintendents in mills where this greater efficiency now prevails. There are mills in every part of the country equipped with the NEW BELOIT. Ask the man who knows!

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BELOIT IRON WORKS **Beloit, Wisconsin, U. S. A.**

Combined Locks Paper Co. Builds Addition

The Combined Locks Paper Company in December began breaking ground for an addition to its paper mill in the village of Combined Locks. The new plant is to provide additional space for the finishing room and more facilities for storage. It will be of two stories and will have a length of 170 feet and width of 100 ft. The material is of concrete, brick and steel and the style matches the general architecture of the rest of the buildings.

Flambeau Paper Co. Improvements

Dismantling of the Ashland plant of the Flambeau Paper Company has already been referred to. Improvements, however, were made at the Park Falls mill. The company erected a new building for machine shop, carpenter shop. storeroom and locomotive shed purposes, and also built a new beater room. Both structures were of concrete, brick and steel.

New beater room equipment in the Flambeau mill include six new beaters of the latest improved type, a new Jordan, a reconstructed Jordan and several other things, besides an automatic telephone system connecting all departments of the plant.

Badger Tissue Mills Move

Badger Tissue Mills of Kaukauna last year moved into their new quarters in the former Kaukauna Paper Company plant, the machinery and fixtures of which were purchased at a receiver's sale some time previous. The building belongs to the Green Bay and Mississippi Canal Company. Increased production was made possible through the acquiring of new quarters.

Installation of a J. O. Ross Engineering Corporation drying system on a 145-inch board machine, the provision of a dusting and sorting system for handling waste paper and the erection of a new roof over one of the buildings was the principal construction work in the John Strange Paper Company mills of Menasha.

Lakeview Paper Company, of Neenah, owned by Sears, Roebuck & Co., Chicago, engaged a Milwaukee firm to install two new boilers in its power plant last year.

Cornell Wood Products Company, of Cornell, Wis., sped up its production on its 130-inch paper machine running test liner by installing a Valley Iron Works continuous breaker beater and added the necessary pumps and motors.

Equipment projects of the Lake Superior Paper Company at Ashland, the De Pere Pulp and Paper Company and the De Pere Paper Manufacturing Company, of De Pere, have already been referred to.

Marathon Paper Mills Install Machinery

Marathon Paper Mills Company, near Wausau, improved its mills by the installation of two bleaching engines and some filters for reclaiming of waste stock in white water. It also installed a big board paper machine at its Ontonagon Fibre Company plant.

In Appleton the Wisconsin Tissue Paper Mill of the Thilmany Pulp and Paper Company built a new boiler house and smoke stack for the purpose of increasing the power efficiency and reducing the smoke nuisance. It installed two new large boilers for firing by pulverized fuel furnaces.

Clearer and Purer Water

The aim for clearer and purer water has directed paper mills of this state to various methods of accomplishing this purpose. In one case a paper mill constructed a big settling basin; in another a company enlarged its settling basin and installed a complete filtration system; in another a concern completed its filtration plant by the construction of a pumping station; in still another a paper concern hit upon the plan of pumping in water from a clear and unpolluted stream; and in the last case the firm even went to the extent of building a dam and impounding a lake to serve as a reservoir, or huge settling basin.

Construction or improvement of filter plants was undertaken during the year by three Appleton plants, the Fox River Paper Company, the Interlake Pulp and Paper Company division of the Consolidated Water Power and Paper Company, and the Riverside Fibre and Paper Company. The Interlake plant undertook the building of a huge settling basin for the treatment of 5,000,000 to 6,000,000 gallons of water per day. The Fox River Paper Company built an addition to its settling basin and began the construction of a complete filter plant. It also put in a new and permanent flooring in one of its mills at considerable expense. The Riverside Fibre and Paper Company started work on a pumping station for its filtration plant. At the same time it was building a 60 by 30-foot warehouse. Every one of the buildings of this company are almost entirely new, they having been built within the last two years.

With the option of building a complete filter system and purifying the Wisconsin River water, or of extending a two-mile water main to the Plover River basin and erecting a pumping station there, the Consolidated Water Power and Paper Company, of Stevens Point, decided on the latter project last fall, and the work is even now being rushed to completion. At the present writing the main has already been laid, and construction is in progress on the pumping station at the Plover River basin. Thus the company will be able to obtain pure water for the manufacture of paper and will be able to produce a higher grade of paper.

Probably by the time this goes to press, the mill may have its new supply of water. The water will be pumped into the mill from the Plover River basin at a pumping capacity of 2,700 gallons of water per minute at low pressure. The well built at the basin has a depth of 75 feet and a diameter of 30 feet.

Nekoosa-Edwards Paper Co. Builds Lake

At the conclusion of the year work was being pushed by the Nekoosa-Edwards Paper Company, of Port Edwards and Nekoosa, on the project of impounding a two mill lake through the construction of a dam on Four Mile Creek and thus opening up a pure water supply for the paper mill. The company has not been satisfied with the water of the Wisconsin River on which both the plants are located and thus has turned to the spring fed stream, Four Mile Creek.

The lake will form a 12-acre settling basin in which the iron content will be allowed to settle and the purified water will be pumped through 30-inch pipe laid under the Wisconsin River. Some chemical treatment will be necessary but at least three-fourths of the present amount used will thus be saved. The flow of the creek is 40,000 gallons of water per minute, but the company's mills normally use only 10,000 gallons, and are thus assured of a good water supply for years to come.

Power Developments

Power developments were numerous during the past year in Wisconsin. The largest of the projects was the new high tension line of the Wisconsin Gas and Electric Company connecting Milwaukee with the upper peninsula of Michigan. The Northern Paper Mills of Green Bay are in a measure linked with this line, as the power utility company uses the Northern Paper Mills' tower line between Green Bay north to Amberg. From there the two lines branch out into two directions. Ten thousand horsepower are surging over the line since the beginning of the year. Under this project, the hydro-electric plant in upper Michigan will serve southern Wisconsin with reserve power in times of high water and thus effect a saving in steam power at the Lakeside plant in Milwaukee. In times of low water the steam plant will augment the power of northern Michigan. The Northern Paper Mills own a hydro-electric site at White Rapids which it intends to develop. It has an estimated capacity of 14,000 horsepower which will be available to the Green Bay paper mill. The company generates most of its power by steam.

Paper mills using the middle dam in Appleton are planning to reconstruct it at a possible cost of $50,000, but before doing so want settled a case in supreme court in which they are fighting the so-called re-capture clause of the statutes whereby the state in issuing permits to build or reconstruct dams reserves the right

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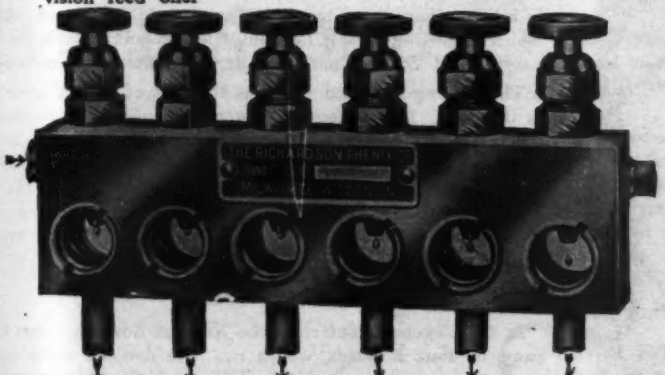

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to confiscate dams and water power after 30 years. The dam has furnished power for the local paper industry for nearly 50 years.

Available power for the paper mills of Kaukauna and immediate vicinity will be augmented through the construction of a power plant at Rapid Croche, which was undertaken last year and is being pushed to completion. It is being built for the Green Bay and Mississippi Canal Company, of Appleton, to be leased to the city of Kaukauna which in turn will use it for supplementing the power, of which it has not been able to furnish enough to its paper mills.

Merging of Power Lines

The merging of power lines which has been going on in an increasing measure the last few years passed through another chapter in the consolidation of seven small companies of central Wisconsin effected by the Insull interests, of Chicago. The lines are located in Wittenberg, Eland, Birnamwood, Elderon, Mattoon, Aniwa, Phlox, Pella, Leopolis and Clintonville. They interconnect with the Wisconsin Valley Electric Company, of Wausau, and 14 waterpower plants, some of which are owned by paper mills.

The canal known as the West Canal, in Appleton, and on which several Appleton paper mills draw for waterpower was substantially repaired last year by the strengthening of the banks and the reconstruction of concrete works. It was the first big improvement in 25 years.

Kimberly-Clark Company's new power plant at Kimberly includes all new equipment consisting of three 960 horsepower water turbines to which are direct connected, vertically, three 900 H.V.A. generators with direct connected exciters.

Wisconsin River Paper and Pulp Company of Stevens Point obtained a permit from the Wisconsin Industrial Commission for the raising, enlarging and reconstruction of its dam spanning the Wisconsin River, just north of the Whiting-Plover Paper Company's dam in the town of Plover. By this project more hydraulic power for the operation of its pulp mill and a part of its paper mill will be developed. The new structure will be of concrete and will be equipped with tainter gates of the proper capacity to control the water in times of floods.

The Little Rapids Paper Company, located on the Fox River, near De Pere, owing to the low water of that part of the Fox River last year, hooked up with the Wisconsin Public Service Corporation, of Green Bay for augmented power, which is used in the operation of wood grinders. The Hoberg Paper Company, of Green Bay, also has decided to do away with its steam power plant and electrify the entire mill.

The city council of Wisconsin Rapids near the close of the year gave permission to the Nekoosa-Edwards Paper Company and the Consolidated Water Power and Paper Company for the construction of a high power line to connect the two plants. This is the last link in the chain connecting power plants along the Wisconsin River from Rhinelander to Nekoosa, and will make possible an interchange of power, thus remedying a situation in which one plant formerly would suffer a power shortage while the other would have a surplus.

Small Power Utility Concerns Consolidated

A number of small power utility companies operated for some time by the Wisconsin Public Service Corporation of Green Bay as separate units have been consolidated with the larger concern. They include the Northeastern Power Company, the Northern Light and Power Company, the Wabeno Lighting Company, the Denmark Light and Power Company.

The Consolidated Water Power and Paper Company, which through an increase in the height of its dam at Biron several years ago was charged with damaging the farm land of Basil and Odilion Rocheleau, of that place, won their case in the state supreme court. The ruling was an affirmation of the decision of the lower courts.

Three power mergers in Wisconsin were effected by the Wisconsin Valley Electric Company, of Wausau, through the purchase of the Waupaca Electric Service and Railway Company, of Waupaca, the Antigo Electric Company, of Antigo, and the Rhinelander Light and Power Company, of Rhinelander last year. The stock in the company is owned mostly by paper mill interests of the Wisconsin River Valley.

Following purchase of the Rhinelander and Antigo utilities, the paper interests organized the Wisconsin Valley Power Company, of Wausau, with C. C. Yawkey, president; B. F. Wilson, vice president; C. S. Gilbert, treasurer; Harold L. Geisse, secretary and general manager; and J. S. Alexander, A. L. Kreutzer and D. C. Everest as additional directors. Considerable extensions to high tension power lines were made last year by the parent concern.

Safety Movement Growing

Wisconsin paper mills which have for years had a prominent part in the development of the safety movement were again conspicuous in this respect last year. Enviable safety records were established in some of the mills and considerable interest in national, regional and local safety meetings has been manifested.

Both the National Safety Congress in Cleveland last fall and the district conference in Chicago drew attendance from Wisconsin mills. Judson G. Rosebush, Appleton, president of the Patten Paper Company, of that city, and general manager of the Northern Paper Mills, of Green Bay, focused great attention to himself in his now famous address, "A Tentative Philosophy of Safety," which he delivered at Cleveland, Chicago and also at the Fox River Valley Safety Conference at Green Bay last November.

The meeting at Green Bay was the first of its kind ever held in the state. It was decided, however, to hold these conferences annually, and the probability is that the next meeting will take place in Appleton, with Neenah, Menasha, Kaukaun, Combined Locks, Kimberly and Little Chute as sister hostesses. The Fox River Valley Safety Conference, while drawing delegates from various industries all over the state, receives its greatest strength from the paper mills of the Fox River Valley.

Safety Contests

In the Cleveland conference the Nekoosa-Edwards Paper Company, of Port Edwards, won a cup in a national safety contest running for a certain period, and Kimberly-Clark Company mills ran closely behind. M. G. Hoyman, safety director of the latter company, presided at the sessions of the Paper and Pulp Section of the National Safety Congress.

Nekoosa-Edwards Paper Company and Kimberly-Clark Company stir up a great deal of interest in the safety movement by conducting inter-mill contests among their own mills, inter-department safety contests and other "stunts" for which desirable prizes are awarded.

The Niagara, Wis., mill of the Kimberly-Clark Company broke its own record run of 150 consecutive days without experiencing a single accident through which a minute's time was lost or a penny's worth of expenses incurred by last year operating 172 consecutive safety-days. Thus its total of 97,800 "man-days" of safety, which it claimed as the world's record for paper mill safety, was extended to a total of 111,584 man-days.

This record was even bettered, as far as man-days of safety are concerned, by the Kimberly, Wis., mill of the same concern. While this mill operated 147 consecutive days without a "lost-time" accident, it piled up a much larger total of man-days, owing to the fact that this mill employs more men than the Niagara plant. This gave the former a total of 131,567 man-days of safety.

Several conventions of paper mill supervisory officials were held in Wisconsin the past year. The Northwestern Division of the American Pulp and Paper Mill Superintendents Association held one of the most interesting and profitable conventions in the history of its organization when it met at Madison last September.

See Forest Products Laboratory

The superintendents gathered in this city in order to take a tour through the United States Forest Products Laboratory which

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is conducting many valuable experiments on problems of the paper industry. R. N. Miller, of the laboratory, gave a most instructive address on "Effects of Cooking Upon Yields and Quality of Sulphite Pulp." The delegates were conducted through the experiment mill and shown experiments being made in producing pulps from various kinds of wood by the sulphate, sulphite and mechanical-chemical processes. One day the superintendents spent in Beloit, Wis., and went on a tour of inspection through the Beloit Iron Works, the Beloit Box Board Company and the Dowd Knife Works.

The week after the superintendents' convention about thirty accountants belonging to the Wisconsin Section of the Cost Association of the American Paper and Pulp Industry held a convention in the same city, Madison. The visitors also were conducted on a tour through the Forest Products Laboratory. Mr. Miller read a paper at the conference.

Tissue Paper Men Meet

On October 9, about 30 manufacturers and jobbers engaged in the tissue paper business in various sections of the United States attended the convention of the Tissue Paper Manufacturers Association, which was held in Green Bay. Among the speakers were Judson G. Rosebush, of the Northern Paper Mills, Green Bay, and Professor John R. Commons, economist of the University of Wisconsin, at Madison. While in Green Bay the manufacturers and jobbers inspected the tissue mills of that city.

The Kimberly-Clark Company of Neenah conducted its eighth annual convention of staff distributors and other jobbers of Kimberly-Clark products, which was held in that city in October. The meetings are held for the purpose of promoting the sale of products and establishing closer contact between manufacturer and distributor.

Made News Print from Eucalyptus

What is regarded as one of the important developments of the paper industry in this state last year is the successful experiment made in the Forest Products Laboratory at Madison on the practicability of the use of eucalyptus for the manufacture of news print paper.

Small quantities of the wood were shipped to Madison by Dr. Edmundo Navarro de Andrade, chief forester of the state of Sao Paulo, in Brazil. The Brazilian witnessed the experiments which were conducted under the direction of R. N. Miller. The work went on continuously, practically night and day for several weeks. The cooking of the wood had to be watched at various stages and temperatures. The result was a good sample of print paper which was run off the press of the Wisconsin State Journal, a Madison newspaper. The discovery is expected to bring into prominence the manufacture of print paper in Brazil, and may solve the problem of spruce depletion in America as the eucalyptus would mature rapidly in southern states.

Education for Paper Mill Employees

Improvement of the efficiency among paper mill employees is the aim of the establishment last year of a course in pulp and paper making in the vocational schools of Appleton, Kaukauna, Neenah and Menasha. Classes have not as yet been started, but a capable instructor has been engaged in the person of Harold Noyes, who comes to the Fox River Valley from Rumford, Maine, where he was engaged in similar work. Mr. Noyes is now making a detailed study of the paper industry in this part of the state to ascertain what the special problems of these mills are. This course is the first of its kind in Wisconsin and one of the very few in the United States. It is possible that the courses may be extended later to other parts of the state.

In conclusion it may be said that the year past was on the whole not only marked by prosperity but also by what follows it —contentedness and good will. To promote good will both among the employees and the general public the paper industry of this state helped materially.

Labor Day celebrations which once were the medium of demagogues to arouse class hatred have become happy family picnics in the Central Fox River Valley through the efforts of paper mills. The Labor Day picnics of the Kimberly-Clark Company at Kimberly and the Combined Locks Paper at Combined Locks last year were the talk of the valley. Monstrous crowds witnessed the elaborate program of recreation and went home happier for the occasion. Of similar influence were the Christmas parties conducted by several of the mills. The clubhouses built by the Kimberly-Clark at Kimberly and at Niagara are community centers in their villages and bring together the people of the community for many a happy occasion.

Acts of Philanthropy

Several of the paper manufacturers again distinguished themselves through acts of philanthropy. The city of Wausau became the recipient of a beautiful park through the generosity of Walter Alexander, Wausau paper manufacturer. The park forms an addition to another which the same gentleman had donated to the city about ten years ago. The site was named McIndoe park in honor of Mr. Alexander's uncle, the late Senator W. D. McIndoe, with whom Mr. Alexander had his home during his youth. With the aid of a landscape architect, the donor converted the park into a veritable gem of fine shrubbery, flower beds, grassy lawns and artificial ponds.

George A. Whiting, of Neenah, twice made Lawrence college of Appleton the object of his generosity last year, first by donating to the institution a new athletic field and later by also building a large and serviceable field house on the site. Both are a credit to the college and have attracted wide attention.

L. M. Alexander, head of the Nekoosa-Edwards Paper Company, of Port Edwards, was the second paper manufacturer to come to the aid of the Appleton college last year. He donated $150,000 toward a $300,000 gymnasium and $50,000 toward a $200,000 gymnasium maintenance fund. He also had donated the present Alexander gymnasium a number of years ago. Mr. Alexander is president of the board of trustees of the institution.

To Build Zellerbach Warehouse at Seattle

SEATTLE, Wash., March 11, 1926.—Bebb & Gould architects in the Hoge building, Seattle, are receiving bids on the contracts for the new warehouse and office building of the Zellerbach paper company which will house the local business of the concern. At present the company has headquarters at 817 Western avenue, but the new structure will be at First avenue, south, and Atlantic street. Dimensions will be 120x150 feet.

An unofficial estaimate states that the structure will cost about $125,000. William Guthrie is manager of the Seattle branch of the Zellerbach company.

Fairfield Paper Co. Not to Build

The contemplated project of The Fairfield Paper Company to locate a branch factory in the east end of Chillicothe, Ohio, has been definitely abandoned by action of the board of directors of that company. The Fairfield Paper Company, through its directors, has informed the Chamber of Commerce there, that owing to the illness of Mr. Griley, and its inability to proceed without his aid, it finds itself obliged to cancel its offer to build a unit of its straw paper plant in Chillicothe.

Mill Improvements in Pennsylvania

Throughout the past six months there have been perfected many plans for the modernizing of mills units and the extension of production through new mechanical installations and the development of power equipment. Many mills have been adding electrical devices for the modernizing of power units and to enable expansion of production. Among them were plants in the eastern and western sections of Pennsylvania.

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INVESTIGATION TESTS DESIGN EQUIPMENT

New York Trade Jottings

Morris C. Dobson, of Springfield, Mass., assistant secretary of the Writing Paper Association, spent several day in New York recently, in the interest of his organization.

* * *

Harry Fletcher, of the Fletcher Paper Company, of Alpena, Mich., spent a few days in New York last week, and sailed on Saturday morning, with his wife and son, for Bermuda.

* * *

Henry W. Stokes, former president of the American Paper and Pulp Association, who has been enjoying a Mediterranean tour, plans to return on the Cunard liner *Aquitania*, due about April 12.

* * *

George R. Wadleigh, Chief Engineer, West Virginia Pulp and Paper Company, has been appointed on the A. E. S. C. sectional committee that is considering a safety code for conveyors and conveying machinery, to represent the American Paper and Pulp Association.

* * *

Mr. and Mrs. John J. Spinelli announce the birth of twin daughters last Sunday, March 14, at 7:30 a.m., at their residence, Reid Avenue and Washington Place, Port Washington, Long Island. Mr. Spinelli is the well known specialist in paper mill supplies, of 15 Park Row, New York.

* * *

The Arabol Manufacturing Company, of 110 East 42nd street, New York, announces that their business has not been interrupted by the fire which occurred in their Brooklyn factory recently. The fire was confined to one small department of their plant and did not affect their general facilities for manufacturing and delivering. As usual, the Arabol Manufacturing Company has plentiful stocks of all their products on hand for prompt delivery, and orders will be given immediate attention.

Envelope Bill Not to be Acted On

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 17, 1926.—The Kendall envelope bill in which the envelope manufacturers have been so interested will not be acted upon by the House of Representatives at the present session of Congress. This was forecast when the Post Office Committee of the House accepted the report of its subcommittee of which Representative Sproul, of Illinois was chairman, suggesting that the bill be tabled. It is understood that those favoring the bill will make an effort to have the bill passed by the Senate at the present session. It is probable, in this connection, that a new and different envelope bill will be introduced.

Installing Fire Alarm Systems

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., March 15, 1926.—Central Station watchman supervision and fire alarm systems are being installed in several local plants by the American District Telegraph Company, including the American Tissue Mills, Inc., Hampden Glazed Paper and Card Company, and the new plant of B. F. Perkins & Son in Willimansett. The system allows of a fire alarm being sent in to the Holyoke Fire Department Headquarters from several points in the respective plants, saving time in getting the alarm in.

Power Plans for Grand Falls

A tentative agreement has been entered into providing for the development of the Grand Falls on the St. John River in New Brunswick, the largest undeveloped natural water power in Canada east of Niagara. The parties to the agreement are the New Brunswick Government, the New Brunswick Electric Power Commission, the International Paper Company, and the Fraser Companies. The falls are to be developed to their capacity, which is put at 60,000 h.p., and the power is to be made available to prospective as well as present manufacturers. The International Paper Company requires 20,000 to 25,000 h.p., and the Fraser Companies 20,000 h.p. The former plans to erect a news print mill costing around $10,000,000. The Fraser Companies will establish a news print mill probably on the Restigouche River, near Campbellton, which will require 14,000 h.p., and the balance of their block will be available for supplementing the power supply for their pulp mill at Edmundston.

National Waste Material Banquet Best Ever

The largest and most enthusiastic gathering in the history of the National Association of Waste Material Dealers, Inc., assembled on Tuesday evening, March 16, in the Grand Ball Room of the Hotel Astor, New York, on the occasion of the thirteenth annual banquet. From every standpoint the event proved the most successful ever held by the association, which now has members in nearly every quarter of the globe.

After a short but timely address of welcome, President Egmont L. Frankel, who proved an efficient toastmaster, introduced the principal speaker of the evening, the Hon. C. C. Dill, as the first Democratic Senator ever sent from the state of Washington to the United States Senate.

In the course of a brilliant speech, Senator Dill gave an illuminative account of the work of the United States Government as a great business organization, presenting to the audience a mass of statistics and figures which fairly took their breath away. He also struck a responsive chord when he spoke feelingly of our ideal relations with Canada and mentioned what a fine object lesson our friendly co-operation with that great country should be to the nations of Europe.

Dr. John L. Davis, who was the next speaker, touched on most of the leading topics of the day in an address which simply bubbled over with good humor and sound common sense.

During the course of the evening, the Wolfsie Orchestra and the Knickerbocker Quartette, rendered musical selections, and the huge gathering harmoniously joined in singing the choruses included in the song review, compiled by Thomas Brady, Inc., New York, and distributed to each guest for the occasion.

Much credit for the success of the event is due to the Banquet Committee, consisting of H. H. Cummings, chairman, Henry Lissberger, Carlton B. Overton and John A. Murphy; and the Reception Committee, composed of Frank C. Overton, chairman, Robert Johnston, Jr., George Birkenstein, J. S. Katz, Lewis Schwab, David Feinburg, Alfred J. Moran, Hermann Weber, Abram Salter and Richard H. Nathan, who ably assisted the officers of the association in the assidious work necessary to make the event such a brilliant affair.

Tariff Commission Makes Report

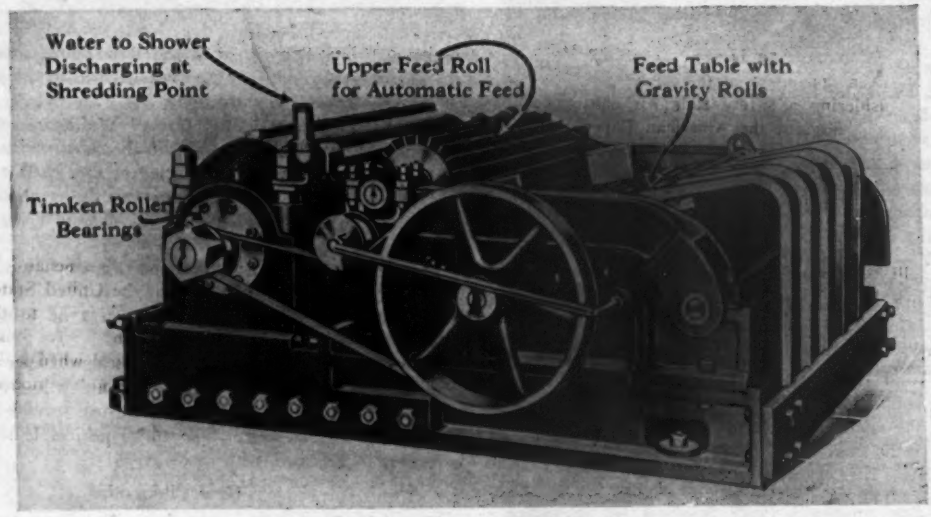
WASHINGTON, D. C., March 16, 1926.—The tariff commission today sent to the President its case in report. While nothing official has been made public it is understood that the commission made no recommendations for a change in rate because it could not ascertain what it considered reliable information on foreign cost production. Unless something unforseen turns up nothing further will be done about the report.

Simplification in Wax Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 17, 1926.—Active steps are being taken it is understood here for the simplification in the waxed paper industry. A questionnaire will be prepared it is understood in the near future and sent out to the trade. This will be followed in due course by a conference at which the simplification program will be discussed.

THE ARPEKO SHREDDER HAS PROVEN ADVANTAGES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The ARPEKO PULP SHREDDER in its present improved form is the fruit of twenty years' experience in building pulp shredders. For the primary reduction of dry, partly dry, or mildly frozen pulp in laps or sheets its advantages are absolutely proven.

Equipped with Timken Roller Bearings, its starting load is only 5 H.P. and it has a capacity for over four dry tons of hard kraft sheets per hour with a 50 H.P. motor.

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CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Downingtown, Pa.—The Downingtown Paper Company has plans under way for a new addition to its local paperboard mill, to be equipped for a capacity of about 50 tons of material per day, reported to cost close to $500,000, with machinery. A bond issue of $750,000 is being sold to provide funds for the expansion. The present mill, consisting of two units, has a rated output of 105 tons of paperboard daily. J. Gibson McIlvain is president.

Brooklyn, N. Y.—The Grand Corrugated Paper Company, 138 Thirty-second street, has completed plans and will soon proceed with the erection of a two-story addition to its plant, 35 x 100 ft., estimated to cost $35,000. Bids on general contract have been asked. Levy & Berger, 375 Fulton street, Brooklyn, are architects.

Chicago, Ill.—John P. Lynch has broken ground for a one-story plant at the southwest corner of Grand and Homan avenues, 39 x 80 feet, for the manufacture of paper boxes and containers, and expects to have the structure ready for the machinery installation at an early date. It is reported to cost about $20,000.

Gardner, Mass.—The American Fiber Company, Soleman street, has asked bids on general contract for the construction of a new one-story addition to its plant, estimated to cost about $45,000, including equipment. Herbert & Foster, 15 Oliver street, Fitchburg, Mass., are architects.

Toledo, Ohio—The Toledo Paper Stock Company, 1309-19 LaGrange street, is said to have preliminary plans under way for the rebuilding of the portion of its three-story and basement factory and warehouse, recently damaged by fire. The work will cost approximately $27,000. E. W. Marvin is general manager.

Indianapolis, Ind.—The Indiana Paper Company, 521 East Washington street, is perfecting plans for the early re-establishment of its plant, destroyed by fire, March 10, with loss reported at $150,000, including building and stock. The structure was used primarily for storage and distributing service. The company has opened temporary offices at 18 North East street, and will likely lease a suitable building for a new works. Fred J. Ostermeyer is president, and Elmer H. Ostermeyer, secretary and treasurer.

International Falls, Minn.—The Minnesota & Ontario Paper Company has commenced the construction of a new paper mill on local site and purposes to have the structure ready for equipment installation in the near future. The estimated cost of the project has not been announced.

Henniker, N. H.—The Monadnock Paper Mills have active operations under way at the local mill of the Contoocook Valley Paper Company, recently acquired, and will continue production under the latter company name, specializing in the production of high-grade book papers. It is said that plans for expansion and betterments are under consideration. The Monadnock company operates a mill at Bennington, Vt., and will continue this plant in service. Major Arthur J. Pierce is president of the consolidated organization.

Chagrin Falls, Ohio—The Chase Bag Company, Woolworth Building, New York, has acquired control of the Adams Bag Company, operating a local mill for the manufacture of paper bags, sacks, etc. The new owner is said to be planning to maintain full production at the plant on the same basis as in the past, with plans in contemplation for expansion.

Hutchinson, Kan.—The Carey Wallboard Company has completed plans and will soon begin the construction of a new one-story addition to its plant, reported to cost close to $20,000, with equipment. It is purposed to carry out the erection by day labor. Emerson Carey is president. D. K. McLeod is superintendent in charge of construction.

Seattle, Wash.—The Zellerbach Paper Company will soon lay foundations for a new storage and distributing plant at 1254-64 First avenue, reported to cost in excess of $100,000. Bebb & Gould, Hoge building, are architects.

Glen Miller, Ont.—The Miller Brothers Paper Company has plans under way for the construction of a new hydro-electric power plant in the vicinity of Trenton, Ont., for service at its mill. A power dam will be built. The entire project is reported to cost in excess of $200,000, with machinery.

New Companies

Norwich, Conn.—The Tidewater Paperboard Company has been incorporated with a capital of $100,000, to manufacture paper, paperboard, and kindred products. The incorporators are Donald MacLeod, C. H. Hull and Frank L. McGuire, 240 State street, Norwich.

New York, N. Y.—The Hercules Corrugated Products Company has been incorporated with a capital of $20,000, to manufacture corrugated paper specialties and other products. The incorporators are D. and M. Albert, and A. Perkowitz. The company is represented by S. L. Wallerstein, 220 Broadway, New York.

Philadelphia, Pa.—The Puritan Stationery Company is being organized to manufacture and deal in writing papers and other fine paper products. Application for a state charter will be made on April 1. The company is headed by Milton J. Heim, Virgil H. Prentice and Herman Batoff. It is represented by Levi & Mandel, North American building, Philadelphia.

New York, N. Y.—The General Bag Company has been incorporated with a capital of $20,000, to manufacture and deal in paper bags, sacks, etc. The incorporators are I. Kling, J. Breen and H. M. Gordon. The company is represented by Jacob Rubin, 299 Broadway, New York.

Philadelphia, Pa.—Charles T. Robinson, Inc., has been incorporated with a capital of $85,000, to manufacture and deal in paper bags and containers. H. M. Robinson, 4522 Spruce street, Philadelphia, is treasurer and representative.

Wilmington, Del.—The Glacifer Company, care of the Corporation Trust Company of America, Du Pont building, Wilmington, has been incorporated under state laws with capital of $1,000,000, to manufacture glassine and glazed paper specialties.

Financial

Seattle, Wash.—The Pacific Paper Products Company has filed notice of increase in capital from $140,000 to $500,000, for general expansion.

Queens, N. Y.—The Columbia Paper Company has filed notice of dissolution under state laws.

Middletown, Ohio—The Advance Bag and Paper Company, manufacturer of kraft paper bags and containers, etc., is disposing of a preferred stock issue of $785,400, a portion of the proceeds to be used for general financing, expansion and operations.

New York, N. Y.—The William C. Jones Envelope Company, Inc., 708 Broadway, has filed notice of increase in capital from $100,000 to $200,000, for general expansion.

Watervliet, Mich.—The Watervliet Paper Company has filed notice of increase in capital from $820,000 to $1,000,000, a portion of the fund to be used for expansion. The company will soon begin a general extension and improvement program at its local mill.

New York, N. Y.—The Universal Crepe and Tissue Mills, Inc., 45 West Forty-fifth street, has arranged for an increase in capital from 500 to 4,000 shares of stock, of which 3,000 will carry a par value of $100, or $300,000, total, and 1,000 shares, no par value. A portion of the advance will be used for general expansion in operations.

Bids for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 17, 1926.—The Government Printing Office has received the following bids for 38,500 pounds Binder's Board, various sizes: The Davey Company, $125.00 per ton; R. P. Andrews Paper Company, $86.50 per ton; Whitaker Paper Company, $111.00; Barton, Duer & Koch Paper Company, $119.00; R. C. Osburn Paper Company, $97.00.

The Printing Office also has received bids for 10,000 yellow shipping tags, 11 x 2¾ as follows: International Paper Company, $4.65 per thousand; Dennison Manufacturing Company, $3.40; Denney Tag Company, Inc., $3.10; Samuel Cupples Envelope Company, $4.24; R. P. Andrews Paper Company, $3.60; and T. A. Cantwell & Company, $3.40.

The Government Printing Office has received the following bids for 10,500 pounds wood manila tag board, 12 x 18,—30: R. P. Andrews Paper Company, 4.57 cents per pound; Maurice O'Meara Company, 5.85 cents; Reese & Reese, 5.74 cents; Dobler & Mudge, 5.69 cents; Barton, Duer & Koch Paper Company, 5.69 cents; Lindemeyr & Harker, 4.9 cents, plus 25 cents per cwt. for frames; R. C. Osburn Paper Company, 5.8 cents; and Old Dominion Paper Company 6.34 cents.

The Government Printing Office will receive bids on March 22 for 40,000 pounds (20,000 sheets) No. 2 quality, 25 x 30, No. 25 binders board.

Roller Paper Co. Reorganizes

[FROM OUR REGULAR CORRESPONDENT]

WILKES-BARRE, Pa., March 15, 1926.—The Roller Paper Company at Wilkes-Barre recently re-organized with Charles E. Roller, president and general manager, Anthony Zoeller, secretary, and E. J. Hildmeyer, vice president and treasurer, who constitute the officers and board of directors as well. The company is making progress along very conservative lines and handle twine, wrapping paper, printing paper and specialties.

The firm will move on April 1 to new and better quarters on the corner of Pennsylvania avenue and Jackson street, the premises owned by Mr. Hildmeyer.

As some of its files have been missing since the temporary interruption of its business last December, the company invites manufacturers and mill representatives to send them new and complete samples and catalogues.

Cottontex Products Co. Buys Mill

HARTFORD, Conn., March 15, 1926.—The Cottontex Products Company, Inc., has purchased the plant of the Burnside Tissue mills. C. H. Bortell, Jr., is president of the company.

Obituary

Walter Alexander

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., March 15, 1926.—Walter Alexander, 76, president of the Marathon Paper Mills Company, of Wausau, died on Sunday at Miami, Florida, where he had been spending the winter.

Mr. Alexander was prominent in industrial, political and social affairs of the state, and was highly esteemed in his own community. He had donated several parks to Wausau. He was born in Scotland in 1849. The family came to America in 1858 and settled in Portage County, where they engaged in farming.

Walter Alexander spent much of his time in Wausau at the home of his uncle, the late Senator W. D. McIndoe, for whom Mr. Alexander later named a park which he gave to Wausau. After his school days he entered the saw mill of Mr. McIndoe, and the firm later became known as the Alexander-Stewart Lumber Company, of which Mr. Alexander was manager. He had large lumber holdings and other business connections in the south and northwest. He was president of the Marathon County Bank, vice president of the American National Bank of Wausau, a former director of the First National Bank of Milwaukee, and a director of the Wisconsin Valley Electric Company of Wausau.

William J. Walsh

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., March 11, 1926.—William J. Walsh, 422 East 41st street, Portland, Oregon, died February 26, after a rather prolonged illness which a few months ago forced his retirement as vice-president and manager of the Endicott Paper Company.

Mr. Walsh was born in Centerville, Iowa, April 27, 1888. He came to Portland in 1910, five years after graduation from St. Ambrose College, and for ten years was with the Blake-McFall Paper Company in Portland. Later he became active in the organization of the Endicott Paper Company, with which concern he was associated at the time of the fatal break in health.

He is survived by his widow and one son, Jack E. Walsh, of Portland, and one sister, at Los Angeles.

Wages of Pulp and Paper Workers

The annual meeting of the International Brotherhood of Pulp, Sulphite, and Paper Mill Workers was held in Montreal during the week. Notwithstanding the fact that 75 locals submitted resolutions favoring a five cents an hour increase in pay, and notwithstanding the fact that the Wage Committee brought in a report favoring the increase, the proposals were voted down. The voting also went against a strong demand from Iroquois Falls for a 10 cents an hour increase. Instead of asking for a general increase to come into effect when the present agreement expires on May 1, the conference voted to ask that adjustments in wage rates be made in certain positions where men are now getting below the union schedule, and also where men have increased responsibility on account of installment of new and molern machinery. The majority opinion was that the present was an inopportune time to ask for a general wage increase in view of the drop in the price of news print paper.

United Paper Mills Annual

The annual meeting of the United Paper Mills, Ltd., Toronto and Hamilton, was held recently in the head office, Toronto, and a satisfactory report presented for the past year. R. I. Finlay, who is a former president of the Canadian Paper Trade Association, was reelected president, Harold G. Finlay, vice-president, and E. L. Young, secretary-treasurer. The company has inaugurated the practice of holding regular monthly luncheon meetings of the sales staff, and the first of these sessions took place lately at the City Club.

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PAPER EXPORTS EXPAND

Exports of paper and board from the United States during the month of January were valued at $2,135,725. an increase of $385,000 or 22 per cent, over similar shipments during the same month of last year, according to the Paper Division of the Department of Commerce.

While a majority of the various classes of paper and paper products shared in this increase, the rise in value of the January exports resulted principally from increased shipments of a few classes, more particularly news print, writing paper, and box board. Exports of the first two items in each case show a gain in value of approximately $100,000 in comparison with those of January, 1925, and of $54,000 and $39,000 respectively when compared with those of December, 1925. Nearly as great a gain was registered in box board shipments, which exceeded those of January, 1925, by $81,000.

Other outstanding increases occurred in shipments of surface-coated paper, which increased $48,000 in value, in boxes and cartons, which increased $35,000 and in wrapping papers, which increased $27,000.

With the exception of bristol boards, exports of all classes of board, including wall boards, during January were smaller than those of the preceding month and those of January, 1925. Other classes in which the January shipments also failed to attain the volume of those of the corresponding month last year were book paper, greaseproof and waterproof papers, tissue, toilet, cigarette, hanging, and sheathing and building papers, paper bags, and envelopes.

Exports of paper base stocks, which were valued at $449,636, also show a slight decrease, the gains registered in shipments of pulp wood, sulphite pulp, and soda pulp being more than offset by losses in shipments of other wood pulp and of rags.

Imports of paper and board into the United States during January were valued at $9,810,486. a slight increase when compared with similar receipts during January, 1925. This increase, however, was due almost entirely to larger receipts of news print paper, of which 126,923 short tons, valued at $8,691,397, were received in comparison with 112,586 tons, valued at $8174,459 during the corresponding month last year. Receipts of writing and tissue papers and of pulp and papier mache products were also greater than those during January, 1925, but with these exceptions receipts of paper and board show a consistent decline, the total value of this class of imports (exclusive of news print paper) amounting to only $1,119,089 during January compared with $1,407,317 during last year.

Importations of most classes of paper base stocks show a considerable decrease when compared with those of the corresponding month in 1925, although showing a substantial increase compared with the December, 1925, receipts of these classes. Pulpwood imports fell off approximately one-third compared with those of the corresponding month last year, January receipts reaching a total of only 83,131 cords, valued at $775,617. Imports of wood pulp and other paper base stocks on the whole were some what more on the level with those of a year ago, the total receipts of 160,792 tons, valued at $9,318,738 representing a decrease of only 10 per cent when compared with those of January, 1925. The chief losses were registered in receipts of unbleached sulphate pulp and of rags, which fell in value $772,000 and $532,000 or 40 per cent and approximately 30 per cent, respectively, under January, 1925, receipts. Other classes in which losses occurred included bleached sulphite pulp, waste bagging, waste paper, old rope, and other paper stock.

Imports of ground wood and of unbleached sulphite pulp, on the other hand were somewhat heavier than those during the corresponding month in 1925.

PAPER EMPLOYMENT EXPANDS

The employment figures for January just issued by the Bureau of Labor Statistics of the Department of Labor reflect the expansion that has been reported of late in the pulp and paper industry.

Reports were received by the Bureau from 208 paper and pulp plants which gave their employment in December at 55,480 increasing in January to 55,630, an increase of 0.3 per cent. The payrolls in these plants on the other hand decreased from $1,508,437 in December to $1,487.335 in January a decrease of 1.4 per cent.

One hundred and sixty-two paper box plants reported their employment in December at 18,977, decreasing in January to 18,224, a decrease of 4 per cent. The payrolls in these plants also decreased from $426,031 in December to $403,501 in January, a decrease of 5.3 per cent.

The reports received by the bureau showed also that in January of last year employment in 201 paper and pulp plants amounted to 52,802, increasing in the same month of this year to 54,593, an increase of 3.4 per cent. The payrolls in these mills also increased from $1,404,656 in January of last year to $1,462,771, an increase of 4.1 per cent.

One hundred and forty-three paper box plants reported their employment in January of last year at 15,838 increasing in the same month of this year to 16,173, an increase of 2.1 per cent. The payrolls in these plants also increased from $341,794, in January of last year to $355,111 in the same month of this year, an increase of 3.9 per cent.

Reopen Question of Eddy Shares Distribution

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., March 15, 1926.—Violation of the Constitution of the United States and that portion of the 14th amendment to the Constitution which provides: "Nor shall any state deprive any person of life, liberty or property without due process of law" is charged in a bill filed in the United States District Court for the Western district of Michigan against the Eddy Paper Company of Michigan.

Jacob B. Vandenberg and others, through their attorney, Claud S. Carney, have re-opened the question of the distribution of the assets of the original company during the course of its acquisition by the Eddy Paper Company of Illinois. Preferred stockholders in the Eddy Paper Company of Michigan, the plaintiffs in the present case, also attack the decision handed down by the Supreme Court of Michigan in the case of John C. Maxwell vs. The Eddy Paper Company of Michigan, which, while granting the prayer of Maxwell and co-plaintiffs in that suit in the distribution of assets, added:

"That the other preferred stockholders are estopped either by vote or acquiescence from objecting to the distribution of the remainder of the said stock of the Eddy Paper Corporation in accordance with the terms of the original resolution and it is therefore adjudged and decreed that the remainder of the 31,250 shares in the Eddy Paper Corporation not allotted to the preferree stockholders who are plaintiffs herein shall be divided among the preferred and common stockholders of the Eddy Paper Company in accordance with the terms of the resolution, namely three times as much in value to each share of preferred stock as to each share of common stock."

The bill then reviews in detail that the capital stock structure of the Eddy Paper Company of Michigan was 700,000 shares of common stock at $10 par a share and 176,400 shares of preferred stock at $10 par value a share. That in the acquisition of the property that the Eddy Paper Corporation agreed to give in exchange for these holdings 31,250 no par shares of the new corporation, this stock having at the time of the sale a market value of about $20 a share. It was also shown that the parties incident to the suit of John C. Maxwell have been ordered settled with, through the distribution of 9,000 shares of the Eddy Paper Corporation's nonpar stock, leaving 22,000 shares for further distribution. The value being estimated at $440,000.

While disclaiming any intention or right by the suit now brought to interfere with the immediate distribution of stock to John C. Maxwell, et al., the parties to the Jacob B. Vandenberg suit now enter a suit for distribution on the same basis, charging that through the decision of the Michigan Supreme Court they have been deprived of property without due recourse to the law.

If this contention is supported, Mr. Carney says that those preferred stockholders who can be lined up in this case will receive 17 shares of Eddy Paper Corporation stock for every 100 shares of preferred stock in the Eddy Paper Company of Michigan. Under the provisions of the agreement the distribution would be on a basis of six shares for each hundred. Notice of the pending litigation has been served on the officials of the Eddy Paper Corporation.

Consolidated Paper Co. Sells Mill Site

[FROM OUR REGULAR CORRESPONDENT]

BALLSTON SPA, March 15, 1926.—The Consolidated Paper Company, of Monroe, Mich., which owned the former National Paper Mill property in this village, has sold the property to James McNamee and William O'Brien, both of Ballston. The purchase price was not announced. The sale includes buildings and water power rights on Kaydeross Creek. The machinery of the plant, which has not been operated for some time, was removed by the Consolidated Paper Company to Monroe, Mich., where it has been added to the equipment of the mills of that place. The Consolidated Paper Company acquired complete ownership of the property about a year ago and at that time it was announced that unless satisfactory disposition of the mill property could be made the plant would be dismantled. There was some talk of raising local capital to operate the mill as part of a power development project but nothing came of this talk.

The mill just sold was at one time one of the most profitable paper manufacturing plants in this section. It was owned and operated for a time by the International Paper Company but was abandoned by the I. P. Company years ago. Thereafter a corporation was formed with local capital and chartered as the Ballston Fibre Products Company, which took over and operated the plant for a term of years. The property has had several owners in recent years.

The sale of the plant by the Consolidated Paper Company is understood to mark the passing of the mill as a paper manufacturing plant. The water power rights are regarded as very valuable and it is reported that the property will be used as a power plant developing hydro electricity.

Superintendents to Meet at Canton

The Southeastern Division of the Superintendents' Association will meet on Saturday, March 27, with the Champion Fibre Company, Canton, N. C.

The program will include the following: "Review of Champion Activities, Operations, and Products," by R. W. Griffith, manager of chemical sales, Champion Fibre Company; "Moisture Tests of Pulp. The Stripe Method of Sampling vs. the Disc Method," by D. A. Helder, chief chemist, Champion Fibre Co.; "Paper Mill and Machine Room Ventilation," by Mr. Fletcher, Ross Engineering Co.; "Sewer Waste and White Water Elimination," by Geo. D. Bearce, engineer News Print Service Bureau, New York City.

Luncheon will be served at the Champion Y.

The program will include inspection of the Champion Mills and an auto ride visiting points of interest.

The evening program will take place at the Battery Park Hotel, Asheville, N. C., and will include an informal dinner and entertainment boosted by "Bill" Benzing of the Champion Fibre Company.

The management of the Champion Fibre Company and the executives of the Southeastern Division are doing everything to make this an interesting and profitable meeting.

Spalding Pulp & Paper Co. Incorporates

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, ORE., March 11, 1926.—Articles of incorporation of the Spalding Pulp and Paper Company have now been filed and this concern is definitely launched, although, as previously announced, it was pretty well assured at the first meeting of those interested. It has been voted to increase the capital stock to $1,200,000, with $600,000 common stock and $600,000 preferred. The initial intention was to incorporate for only $1,000,000.

At the last meeting a block of $50,000 is reported taken by one man with a possibility of his taking double that amount. The stock is being rapidly subscribed. Offices have been opened in the Chamber of Commerce, Newberg, in which town the mill is to be located.

The incorporators are Charles K. Spalding, S. L. Parrett and W. S. Woodworth. Mr. Spalding states that after a thorough survey of the timber supply around that section he feels that timber is available for running the plant for from fifty to one hundred years.

Peoria Mill Installs New Machine

The United Paperboard Company has dismantled its 68 inch 3 cylinder machine at the Peoria Mill and is moving it to its Wabash mill. The Peoria Mill is putting in a new 72 inch 3 cylinder machine for making 9 point strawboard, which is expected to be in operation by April 15.

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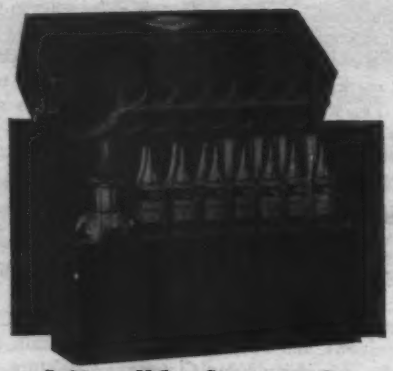

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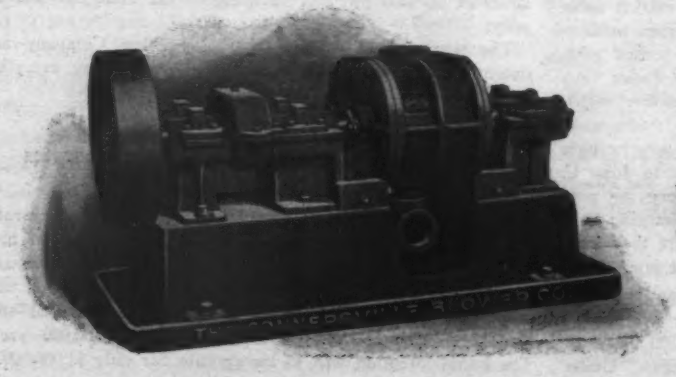

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Section of the

Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

Weighing, Sampling and Testing Wood Pulp

Official Rules Proposed by Joint Committee Representing American Paper and Pulp Association, Association of American Wood Pulp [illegible]rters, Technical Association of the Pulp and Paper Industry, February 5, 1926

1. Forms of Wood Pulp

The form in which wood pulp is available for test include the following:

Baled Pulp—Dried sheets; Hydraulic pressed laps.
Roll Pulp.
Loose Lap Pulp—Wet laps; Hydraulic pressed laps.
Double press West Machine Pulp in sheets.

2. Special Considerations

The official testing of pulp is also governed to some extent by the place, time and quantity of pulp to be tested.

Place At Mill during manufacture.

In transit, for example; At dock during transfer from car to ship for export, or vice versa; At receiving point; Incoming car lots; Incoming shiploads.

Time Freshly made pulp; Stored pulp.

Quantity Lots Warehouse pulp; Open piles.

3. Sampling Methods

Wood pulp is offered for test under such a variety of conditions and in so many different forms that no one method of sampling and testing can be made applicable to all forms.

a. *Strip Method.* The Strip Method of sampling, while well adapted to mill sampling, is not suitable for the sampling of frozen lap pulp at receiving point.

b. *Boring Method.* The Boring Method, while well adapted to the sampling of baled pulp, is not suited to the sampling of wet lap pulp, under 40 per cent air dry.

c. *Wedge Method.* Neither is the Wedge Method, nor any other method which involves the breaking open of the bales, suitable for referee sampling of pulp at dock, since transportation companies decline to handle broken bales or bales which have not been rebaled as perfectly as they were at point of shipment, which is impossible with ordinary handpresses.

d. *Accuracy.* Accuracy in sampling depends more upon taking sufficient and representative samples from individual units, whether bales or laps, to insure a fair average of the lot, than upon any particular method of cutting the samples.

4. Determination of Wet Weight of Pulp

As all pulp is invoiced on the basis of air-dry tons, rules for the determination of the wet weight of the pulp are just as important as rules for sampling and testing, and the wet weight should always be determined by any one of the following methods:

a. *Railroad Weight.* Railroad weight of entire car lot where tare of empty car is actually determined by weighing it. (This does not mean the routine bill of lading railroad weight, but an actual weighing upon railroad scales supervised by party or parties at interest.)

Note: Each car should be uncoupled from the train and weighed separately.

b. *Certified Weight.* Weight of entire car lot as certified by official recognized weighing bureau issuing weighmaster's certificate of weight.

c. *Weighing by truck and tested scales.* Wet weight of lot by sum of weights of truck loads passing over accurately tested scales during loading or unloading.

d. *By calculation from average weight of parcels.* *Wet weight of lot may also be determined by multiplying the actual number of bales or rolls in the shipment, as determined by accurate count, by the average weight of the bales or rolls weighed and sampled. Note: See Section 6, a, paragraphs 1 and 2; also Section 6, c, paragraph 1. In domestic roll or wet bale pulp the variation (in weight between individual rolls or bales) is often so great that it may be necessary to weigh the entire shipment.

Where bales are numbered, the numbers upon the bales selected should be indicated in report.

A normal bale should be intact and unbroken. Reject as abnormal those bales whose weight differs from average gross mill weight by more than 10 per cent plus or minus.

* **Note: When this method is used for determining the total weight, all the bales weighed, and none others, are to be sampled.**

5. Sampling at the Pulp Mill

a. *Strip Method*

1. Wet Machines. Pulp coming from wet machine.
2. Drying Machines. Pulp coming from driers in continuous web.

Details: Cut 2 or 3 inch strip across entire width of web coming from machine. All strips cut should be the same width and uniform across the machine.

Rate of sampling wet machine pulp; one sample as above described every 2,000 lb. wet weight production. Rate of sampling web dried pulp; one sample across the machine for every fifth bale or roll production.

It is to be noted that where this method is applied to dried pulp, the wet weight of shipping units shall be taken at substantially the same time as sampling for moisture test.

In case pulp is stored at mill before shipment, the shipping units lap, rolls or bales, shall be subject to methods of sampling covering pulp in these various forms. Wet weight of lot to be determined at time of sampling.

6. Sampling on Dock or at Receiving Point

(Where first test is made)

(a) Boring Methods. Suitable for sampling. (1.) Baled pulp in sheets. (2.) Roll pulp.

(1.) *Baled Dry Pulp.* a. Number of bales to be sampled.—Not less than 5 per cent of the entire shipment, except by agreement, but not less than 15 bales shall be sampled. Samples to be drawn from only sound and intact bales from different sections of entire shipment and analyst shall be careful to observe that no unusual conditions prevail in selection of bales.

(b.) *Details.* The samples shall be taken by boring into a bale to a depth of 3 inches with a special tool which cuts a disk about 4 inches in diameter. The disks shall be removed and 10 of them taken as a sample, these to be selected as follows:

One disk second sheet from the wrapper
Two disks 1 inch deep
Three disks 2 inches deep
Four disks 3 inches deep

The holes to be bored shall be so located that in five successive bales they will represent a portion extending diagonally across the bale. Each bale is to be bored but once. The first bale to be bored at the corner, the edge of the cut being at a distance of 1 inch from the edge of the bale. The second cut shall then be made half-way between the location of the first cut and the center of the bale; the third bale shall be cut at the center; the fourth bale halfway between the center and the corner; and the fifth bale in the opposite corner in a position corresponding to the first.

(2.) *Roll pulp.*

(a) Number of rolls to be sampled: At least 10 per cent of lot, where possible to determine; same proportion of outside rolls to center rolls should be maintained as coming from machine.

(b) *Details:* Edge of first hole 2 inches from one end, holes in succeeding rolls shall be spaced successively one-fifth of the distance across the roll as in bale sampling, traveling toward opposite end of roll. Selection of disks either in accordance with bale boring given above or second disk and four others taken at least 1½ inches from outside of roll as in case of strip method for roll pulp following.

B. Strip Method. Suitable for sampling. (1) Pulp coming from double press wet machine, but not hydraulically pressed. (2) For unpressed lap pulp. (3) Roll pulp.

Details: The entire shipment of loose pulp, whether in laps or sheets, must be weighed at the time of sampling.

(1) *Double press machine pulp, not pressed.* A strip 2 or 3 inches wide through center of sheet, alternating with and across machine run. Sampling to be continuous through lot and rate of sampling should provide at least one strip for each 2,000 lbs. of wet pulp. All strips cut should be the same width.

(2) *Lap Pulp Unpressed.* A 2 inch strip through center of lap alternating long way and short way of lap. Depth half way through. Sampling to be continuous through car lot and rate of sampling should provide at least one strip for each 2000 lbs. of wet pulp.

(3) *Roll Pulp.* For roll pulp, take tests strip 2 or 3 inches in width across the face of the roll from second layer and 4 other similar strips from layers located at least 1½ inches or further from the outside layer. All strips cut should be the same width.

While the strip method is quite commonly used for sampling hydraulic pressed lap pulp, this method is known and has been proved to give high results, both by calculation of ratio of wet edge to dry center of sample compared with ratio of wet edge to dry center of total lap, and by repeated actual tests comparing sample so taken with moisture tests on whole lap.

C. Wedge Method. Suitable for sampling. (1) Lap Pulp. (2) Hydraulic pressed laps.

This method is admittedly accurate when followed in exact details. The principal objection to its adoption as the only standard are the practical difficulties in getting non-technical samplers to space the cuts accurately in forty divisions around successive laps. Further, a saw is not always available. As an alternate method, the committee recommends the modification wedge method, which has been proved by experience to give results well within practical limits of accuracy.

1. *Details:* Angle of wedge must be exactly 9 degrees. A wedge sample to be cut from every 2000 lb. wet weight when piled loose in car. The wedge to be approximately 2½ inches at widest point, and extending to center of lap. Depth of cut: Half through lap. Position of cuts: These to start at middle of closed edge of lap as first position. Successive laps to be cut going round clock-wise as shown below:

2—Selection of Laps from Hydraulic pressed bales:

From 20% of the bales sampled, withdraw the middle lap.
From 40% of the bales sampled, withdraw the lap half-way between the outside and the center.
From 35% of the bales sampled, withdraw the lap next to the outside.
From 5% of the bales sampled, withdraw the outside lap.

Those laps which are withdrawn from the outside of the bales are to be sampled on that side which formed the surface of the bale. It is convenient to weigh and sample a total number of bales which is a multiple of 20 and the total number weight of the sample should be at least 2½ per cent on large lots and 5 per cent on small lots.

7. Samples

A. Sampling. Samples must be drawn only from sound and intact bales, and from different sections of the entire shipment; the analyst shall be careful to observe that no unusual conditions prevail in the selection of the bales.

The sampling must be done by or supervised by the approved chemist personally, or by his competent *bona fide* assistant.

Note: In the opinion of the Committee, the words, "bona fide assistant" as used above, are interpreted as indicating an individual actually and continuously in the paid employ of a recognized chemist. The chemist is held responsible for the acts of his bona fide assistants. The Committee differentiates between a bona fide assistant, as interpreted above, and an agent, as such, not continuously in the paid employ of the approved chemist.

B. Care of Samples. The samples, as taken, to be immediately deposited in a metal can with tight-fitting cover and the net wet weight obtained as soon as practicable after taking samples. In case of unavoidable delay between time of taking samples and weighing, a special precaution should be taken to seal edges of cover air-tight with friction tape or otherwise.

C. Weighing of Samples. Accurate scales and weights to be used for weighing both wet and dry samples. Both wet weight and dry weights should be obtained upon same scales with same weights. The hot samples should be weighed immediately after being withdrawn from the oven. Care should be taken to avoid convection currents while weighing.

D. Sensibility of Scales. Scales used for weighing pulp samples must show a sensibility of 0.1% of maximum load. For example, if 1 kg. (2.2 lb.) of pulp samples are taken, the scales must show a decided deflection by the addition of 1 gram to load.

E. Drying of Samples. The entire bulk of the samples selected from the bales must be dried out for the test. After weighing wet samples, these should be placed in suitable oven and dried to constant weight at temperatures of not less than 210°F and not more than 220°F. The maximum allowable temperature at the time of first dry weight shall not exceed 220°F; temperature of at least 210°F must be maintained for determination of final dryness. Two successive weighings at least two hours apart

should not show a variation greater than 0.1 per cent of wet weight of samples and the minimum of these weights is to be taken as final bone dry.

F. CALCULATION OF AIR DRY WEIGHT. Divided percentage bone dry by 0.9 to give pecentage air dry.

8. Weight of Shipment

A. WEIGHT. The accurate weight of all bales sampled must be ascertained by a competent weigher before sampling; all bales weighed and no others are to be sampled; whenever bales are numbered the number is to be given in addition to the weight.

B. SCALES. Scales will be accepted as accurate: (1.) When bearing current seal of official sealer of weights and measures. (2.) When verified by standard test weights. (3.) When verified by comparative weighings with scales of accepted accuracy, e.g., scales used for weighing paper for shipment. (4.) When verified by weighing known or measured volume of water.

*Accuracy.

Scales for weighing bales shall be provided with at least 1 pound divisions. Those equipped with counterbalances shall not be permissible.

They shall have such accuracy that they will show a variation of not more than 1 pound when a standard 400 pound weight is placed upon them after having been balanced.

9. Retests in Case of Disputes

In case of dispute, a retest shall be made either by one chemist acting for and mutually agreed upon by both parties, or a joint (e) test shall be made by chemists representing both parties. In case of a "joint retest" both chemists, or their authorized representatives shall be present during the sampling and weighing and subsequent testing of samples, but only one set of samples shall be obtained from the bales weighed and these samples shall be dried in an oven approved by both chemists. In such cases retests coming within 1 per cent of the original air-dryweight of pulp as invoiced will be deemed to uphold the original invoice, complaint deemed groundless and expense of test to be borne by the party making complaint.

Note: Wherever possible, in all cases of dispute, the shipment should be kept intact and in no case shall there be less than 50 per cent of the lot presented for retest.

10. Chemists' Assistants

The chemist will be held responsible for the correct sampling by his bona fide assistants.

11. Test Certificates

Every test certificate shall clearly state the name of the person who did the sampling.

The test certificates hereafter shall be uniform and in accordance with forms to be approved by the Committee, a sample draft of which will be furnished by the Committee to each Chemist.

12. Investigations by Committee

The Committee shall at any time have the privilege of investigating the sampling and testing done by chemists or their assistants.

APPROVED BY JOINT COMMITTEE

Alton Faunce—representing: Association of American Wood Pulp Importers

W. G. MacNaughton—representing: Technical Association of the Pulp and Paper Industry.

O. M. Porter—representing: American Paper and Pulp Association. December 16, 1925.

Bath Iron Works to be Sold April 6

The date of the sale of Bath Iron Works, Inc., at Bath, Me., has been changed to Tuesday, April 6; Wednesday, April 7, and Thursday, April 8. The auctioneers, Industrial Plants Corporation, 25 Church street, New York, are preparing an illustrated catalogue, and will be glad to send it upon request.

To Act on Stream Pollution in Michigan

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., March 15, 1926.—Concerted action to eliminate stream and lake pollution in Michigan was pledged Tuesday of last week when representatives of 28 out of the 31 paper mill concerns in Michigan met in Lansing at the call of the state department of health and conservation. These concerns agreed to co-operate in every possible way to stop the discharge of waters from their respective plants.

The industries will each be served at once with an official state notice to get together and make some concrete start toward aiding this movement within 60 days. Fred M. Warner, assistant attorney general, was chairman of the conference.

In response to the suggestion of Dr. R. M. Olin, state health commissioner, the paper mill representatives selected a committee of six members to make a survey and study methods of elimination of stream pollution and work with the state departments to the end of cleaning up existing conditions.

This committee consists of Felix Pagenstecher, president of the Bryant Paper Company, Kalamazoo; Lee Rauch, president of the Consolidated Paper Company, Monroe; Harry Fletcher, Fletcher Paper Company, Alpena; F. M. Bither, American Box Board Company, Grand Rapids; Fred C. Clark, Hawthorne Paper Company, Kalamazoo; P. P. Schnorback, Filer Fibre Company, Filer City.

This committee will through its technical departments and engineers make a careful study of tests, experiments and plans for handling all waste waters going into lakes and smaller streams so that fish life will not be endangered and public health will be safeguarded.

"Anyone knows that stream and lake water is not pure in its natural state and in fact probably no such water is ever absolutely pure," said Dr. Olin in response to the question as to how far the state expects the mills to act in eliminating impure wastes from public waters. "You cannot be expected to turn the water back into the streams or lakes purer than when you took it out. When the individual industries show that their wastes running back into the streams area are as pure as when the water was pumped out for manufacturing purposes and that those waters contain no injurious substances, do not endanger fish life and do not jeopardize the public health or contribute to a public nuisance, then the state will be well satisfied."

Considerable time was taken at the conference in a study of paper mill screening and saveall appliances. It was shown that in many instances they not only prevent stream pollution, but effect a decided saving to the mills. The profits on some of these waste saving devices is reported to range from 157 to 600 per cent.

While the special committee named has agreed to have its initial report ready for the department within 60 days, it is recognized that thoroughly to bring about the reforms required will probably take years. Many of the mills in the Kalamazoo valley district have been studying pollution problems for a considerable period and have already expended considerable sums of money in an effort to arrive at a definite solution of conditions. Every mill in the Kalamazoo valley was represented at the meeting.

Effect of Residual Soda in Kraft Container Board

SPECIAL REPORT No. 39

To what extent, if any, does a trace of soda in sulphate pulp affect the test of kraft test liner?

To what extent also would it effect the waterproofing of the board?

Those making kraft pulp for container board and those making the test liners for kraft should send their discussion to the questions to W. G. MacNaughton, 18 East 41st street, New York.

Those who contribute to the discussion will be supplied with a transcript of all the replies.

Report On Methods For Testing Chemical Lime

By O. L. Cook *

The paper industry in the United States uses nearly twice as much lime as any other chemical industry. In 1921 statistics show that the chemical industries consumed 960,000 tons of lime, 236,000 tons of which were used by the paper industry. With the avdent of liquid chlorine bleach during the last two or three years, this consumption has been greatly increased.

Lime, often termed "The Queen of Bases," is one of the most important chemicals used in the industry, and yet there is probably less control by analysis in connection with its manufacture and use than with any other chemical. The two reasons largely responsible for this are, first, the low price of the material, which naturally limits laboratory expenditure, and second, the lack of quick satisfactory methods for the necessary determinations. In connection with the first of these two reasons, the Lehigh Lime Company, with which I am connected, is especially fortunate. By virtue of being a subsidiary of the Lehigh Portland Cement Company, we enjoy the unusual advantages of that company's extensive laboratory and research facilities, and the progress we have made in the manufacture of chemical lime is largely due to this technical assistance. Incidentally, the Lehigh Portland Cement Company is now building the most complete research laboratory of its kind in the world. It will be devoted entirely to research work on cement and chemical lime, the work being headed by Ernest Ashton, chemical engineer of the Lehigh Company for many years, and who is probably the foremost authority on cement and the chemistry of the non-metallic minerals. Without competent technical supervision and laboratory control the manufacture of uniform high quality chemical lime is impossible. For over three years our efforts have been almost entirely focused on the particular requirements of the paper industry, and it is interesting to note that in the last two years the greater part of our total production was sold to paper mills.

Principal Difficulties

The separations in the analysis of limes and limestones are not particularly troublesome, the difficulties being principally in devising fairly accurate, rapid routine methods for use in small limited laboratories. In determining the value of a lime the selection of the sample is even more important than the method of analysis. In many laboratories the accuracy of the analysis is out of all proportion to the accuracy of the sample. Quick lime and limestone, usually found in large lumps, are rather difficult to sample correctly. If the limestone is being ground for gravel, a good sample can always be secured. If, however, the deposit has not been broken, it is necessary to channel across the bed, or resort to core drilling, collecting all the pieces, grinding them, and then quartering them for the sample. With quick lime it is usually best to slake it to a milk or powder, any sludge or impurities being weighed and analyzed separately. For sampling hydrated lime, the ordinary methods may be employed, a like quantity being taken from a number of bags and quartered. The instructions for sampling contained in the "Standard Methods for Testing Materials in the Pulp and Paper Industry" are very satisfactory.

The fact that lime changes very rapidly in composition, due to absorption of water and carbon dioxide, is very often disregarded by chemists. While fine grinding, and as small a sample as possible, is usually the best practice, it is preferable with lime to take a fairly large coarse sample, to insure uniformity and to prevent absorption and consequent change in composition. Under identical conditions some very reactive limes might show considerable change in composition while others would show practically none.

Volumetric analysis methods are as a rule more practical than gravimetric methods, principally because they are much quicker. If accurate results are desired, care should be taken with the readings of the meniscus in the burette, the uniform draining of pipettes, temperature effect on volumes when measuring solutions, and end points of titration. If care is used in selecting it, Iceland Spar is even better than the pure sodium carbonate supplied as a standard for the acids and alkalies used in lime analysis.

Available Methods Considered

During the past year I have gathered and carefully considered all the available methods for testing limestone (calcium carbonate), quick lime (calcium oxide), and hydrated lime (calcium hydroxide). I have discussed these various methods with a number of technical men, most of them connected with the paper industry, and in addition have conducted numerous comparative tests in our laboratories.

The methods now described in the "Standard Methods for Testing Materials in the Pulp and Paper Industry," namely, "Limestone Analysis," and "Lime for Causticizing," are very accurate, standard methods, and I would not recommend any changes. I do, however, feel that certain additions can be made which will further increase the value of this work, and in this connection I make the following suggestions.

Considering first the testing of lump or quick lime (calcium oxide) to determine its causticity, I believe that the addition of a simple alernate method would be helpful and submit the following two methods for consideration. These methods are in actual use in paper mills, and their value lies not necessarily in the accuracy obtained, but in comparative results.

Causticizing Test Used by H. L. Joachim

A solution of 5 grams of sodium carbonate in 250 cc. water is brought to a boil. To the boiling solution, 2.5 grams of the finely divided lime (80 mesh) is added, and the solution is kept at a slight boil for 30 minutes, care being taken to keep the volume constant by adding hot water. After 30 minutes liquor and precipitate are transferred into a 250 cc. graduated cylinder, which allows the determination of the settling rate and volume of sludge produced. After settling, 5 cc. of the clear liquor are titrated with tenth normal HCl and Methyl Orange, as indicated. This gives NaOH plus Na_2CO_3. 25 cc. of the clear liquid is mixed with 50 cc. of a saturated $BaCl_2$ solution made up to 250 cc. in a graduated flask and allowed to settle. 50 cc. of the clear liquid is titrated with tenth normal HCl and Methyl Orange, as indicated. This gives NaOH.

$$\frac{\text{NaOH}}{\text{NaOH} + \text{Na}_2\text{CO}_3} \times 100$$

gives causticity of the liquid, which should run between 82 and 85 per cent.

Causticizing Test Used at the Mead Pulp and Paper Co.

Dissolve 200 grams of Na_2CO_3 in about 1.5 liters of warm water (adding small amounts at a time with stirring) in a beaker or other suitable vessel which may be heated. Add 100 grams of a representative sample of lime crushed to about the size of a pea. Heat until the lime slakes, bring to boil, and boil for one hour. Let settle, pipette off 10 cc. of the supernatant liquor and determine the per cent of causticity by titrating with n/1 HCl, using phenolphthalein and methyl orange indicators.

$$\frac{\text{CC. M.O.} - 2\,(\text{CC. M.O.} - \text{CC. Ph})}{\text{CC. M.O.}} \times 100 = \%\ \text{causticity}$$

$$\frac{50}{\%\ \text{Caust.}} = \text{lb. lime required to caust. 100 lb. } Na_2CO_3.$$

$$\frac{52.33 \times 100}{\text{lb. lime} \rightleftarrows 100\ \text{lb. } Na_2CO_3} = \%\ \text{Act. Caust. or Caust. Purity.}$$

It will be noticed that the lime is finely ground in the first of these methods, while in the second the sample is crushed to the size of a pea. The reason the coarse sample is used in the latter

* Member TAPPI, Sales Manager, Lehigh Lime Company, Chicago, Ill.

method is because it is believed to more closely approach commercial conditions.

As regards the testing of hydrated lime (calcium hydroxide). With the rapidly increasing use of this material in the manufacture of liquid chlorine bleach, I believe that satisfactory methods for testing it should be included in the next printing of the "Standard Methods for Testing Materials in the Pulp and Paper Industry." As the present edition contains no method for the testing of hydrated lime, I would recommend that the Modified Scaife Method be adopted as the standard method. This method is generally used and is as satisfactory as any method yet devised for determining available calcium.

The Modified Scaife Method

Weigh 1.4 grams of the carefully prepared and finely ground (passing 100 mesh) lime into a 250 cc. beaker, add 200 cc. hot water, cover, heat carefully and then boil for 3 minutes.

2. Cool, wash down cover, add 2 drops of phenolphthalein and titrate with normal HCl, adding the acid as rapidly as possible by dropping, stirring vigorously to avoid local excess of acid. When white spots appear, retard the rate of addition of acid somewhat, but continue until the pink color fades out throughout the solution for a second or two. Note the reading and ignore the return of color.

3. Repeat the experiment, using a 1 liter flask instead of a beaker, adding 4.5 cc. less acid than before, call the number of cc. used "A." Grind up any small lumps with a glass rod slightly flattened at one end, dilute to the mark with distilled water, mix thoroughly for 4 or 5 minutes, and let settle for half an hour.

4. Titrate 200 cc. slowly with phenolphthalein and one-half normal HCl until colorless on standing one minute. Call this additional number of cc. "B." Then per cent of available CaO equals 2A plus 5B.

In addition to the Modified Scaife Method, I suggest the following alternate method, which, while not as accurate, gives very reliable comparative results. This method, sometimes called the bi-carbonate method, was developed by B. S. Summers, and first used at the Port Huron Sulphite and Paper Company, Port Huron, Mich.

Dissolve 1 gram of lime in 100 cc. of freshly boiled distilled water in an Erlenmeyer flask and allow to stand several hours to insure the precipitation of magnesium hydroxide. If time does not permit, however, the precipitation may be hastened by heating the mixture for 30 minutes near the boiling point. To the cooled mixture add 400 cc. of approximately 0.1 normal sodium bi-carbonate, made just neutral to phenolphthalein. Shake for 15 minutes, then let stand for 4 hours.

The mixture is then filtered into a 1 liter volumetric flask, adding distilled water to bring up to the 1 liter mark. Mix thoroughly by shaking, then withdraw 50 cc. with a pipette and titrate with 0.1 normal HCl, using phenolphthalein as an indicator. The number of cubic centimeters of acid times 7.409 equals the per cent of calcium hydroxide in the lime.

NOTE.—Throughout the determination extreme care should be exercised to prevent absorption of carbon dioxide from the air, which would impair the accuracy of the result.

The water used for solution, washing, etc., should be as nearly carbon dioxide free as possible, by boiling. All operations in which the solution is in contact with the air should be done as rapidly as possible, for the same reason.

Hollingsworth & Vose Co. Members of TAPPI

The most recent addition to the progressive paper companies who approve of the policy of the Technical Association of the Pulp and Paper Industry, and endorse the value of its work for the paper industry, is Hollingsworth & Vose Company, East Walpole, Mass., well known for the quality of their insulating papers and other grades of paper made from rope.

With Hollingsworth & Vose Company the Technical Association now has forty-three companies on its list of corporate members.

Automatic Web Control

The accompanying illustrations show quite clearly a recent development on high speed paper machines for transferring the web of paper from the presses to the felt, made by Ed Sheahan, who, with his brother, the late William Sheahan, was responsible for the Sheahan Automatic Rope Carrier, used on all the high

WEB CARRIER

speed news machines, on the stack of driers. The first illustration shows it installed at the press. The small roll is perforated, and is located quite close to the press, but not in contact with it. A strong vacuum is applied to a small section of the roll opposite to the press. This results in sucking the strip of paper from the presss to the perforated roll, causing it to drop on to the felt, which then carries it forward.

The second illustration shows how the sheet of paper is carried through the reversed third press and over to the receiving drier.

HOW SHEET IS CARRIED THROUGH THIRD PRESS

There is shown the strip of left which is used in conjunction with the small suction role, and which carries the "tail" of the sheet over to the receiving drier. To papermakers the illustrations will be self-explanatory.

Somewhat over twenty machines, mostly on high speed news, are using this valuable invention. It is being built for Mr. Sheahan by Northern Machinery Company, Sault Ste Marie, Ontario, and is patented in the United States and Canada. Ed Sheahan, who is well known in the industry, is manager of Manistique Pulp and Paper Company, Manistique, Michigan.

TECHNICAL SECTION, PAGE 152

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(To be continued)

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

Predetermined Costs as Applied to Paper Mills*

By C. R. Stevenson, Stevenson, Harrison & Jordan, New York City

I am afraid that it is rather a large order that you have given me this morning, because a really adequate discussion of the question of standard or predetermined costs, would fill up a book that would take a couple of days to read. I know one of my worthy partners has spread himself broadcast in a book on the subject and it is about three inches thick, and if anybody can read it in the short space of a week they are smarter than I am. So it is really a pretty big subject and all I can hope to do is to brief it down and give it to you in a boiled down way.

I don't know how much you gentlemen know or how much you have covered in your meetings before on standard cost. It is a subject that has been very much in the air and very much discussed at all cost meetings in the last three or four years. The probabilities are you have discussed it and probably know more about it than I do and I will probably run the risk of saying a lot of things that are simply repetitions of what you have heard before, possibly of what some of you are actually doing in your own mills, but bear with me if that is the case.

The whole question of cost determination has developed very rapidly in the last five or six years. Up to that time I think practically all cost work with one or two exceptions has been carried out along the lines of what we call historic costs. That is, it was a recording of what had happened; the record of what had happened was compared with records of what had previously happened in other months and on other runs with other lots; various methods of comparison were developed. My old associate, Colonel Franklin, with whom I started in business some twenty-two odd years ago, back in Boston, I think, went further in developing comparative expense analysis sheets and comparative expense and cost statements than almost any one else and I believe he is the executive chairman or some high official in your organization. He has pointed out to you in great detail how he has handled that. Those methods were used in practically all industries. There were operation costs in which costs of different operations were recorded. There were lot costs in which lots of goods as they were put through were kept track of and there were process costs.

Most of the paper mills as I have had experience with them in the older days, that is, back ten or twelve years ago, worked on what you might call a product cost basis. That is, the total expenses were analyzed and segregated and a cost per ton was brought out. In some mills there were variations of that which brought out differences between different grades, but a great many of the paper mills that I was familiar with have always thought of costs in terms of so much a ton. They thought of conversion costs, particularly, in terms of so much a ton.

In the period right after the war we found that this historic method of determining costs more or less broke down. It didn't give the management of our various businesses the information which they wanted. It seemed to have three main difficulties. First, it brought out information which was not truly accurate from the point of view of reflecting values and enabling management to build an intelligent sale price. What happened was that in periods of low production when business was depressed and when it was most difficult to get good prices for the products, it threw the costs up and made them look very high. In periods of activity, when good prices were obtainable and one was getting good production, costs went down and you got low costs.

In other words, you got low costs at the time when you were able to get high selling prices. You got high costs at the time when you had to be satisfied with low selling prices and that really led to a very broad feeling throughout the industry in this country that the cost work that was being done in a lot of our plants was of very little practical value.

Then there was the further difficulty with this historic method that, generally speaking, as it was handled in most of the plants, the information was brought out too late to be of very much practical value. The information came in at the end of the month or possibly at the end of the week, but in any case it came in too late to enable management to go down into its mill (and I speak not only of paper mills but of all mills), and actually put their fingers on what had happened immediately after it happened

In other words, there was too much of a delay between the event, the thing that had happened, and the information coming into the hands of the men who were responsible for the operation of the plant and needed that information to run it.

That didn't sit very well with the practical men in our industry. They complained that cost systems did not give them the practical knowledge and information they wanted in order to run their plants. So there were two indictments that management had against cost work. Then, finally, there was the feeling and actual fact in many cases that this historical cost method of gathering up and recording all the things as they happened against different operations or different lots was too complicated clerically; too much red tape in it; too expensive to operate; that the cost of finding cost was too high. That was another indictment that practical management had against cost work.

It is my own personal belief that the general feeling that man-

* Address delivered at Meeting of the Cost Association of the Paper Industry, at the Waldorf-Astoria Hotel, N. Y. City, on Wednesday, Feb. 24, 1926.

agement had in regard to cost work was to some extent justified. I think that the information which our historic cost systems brought out was absolutely necessary for a company to have. They were vastly better off than without it, and I think it was worth all the money it cost to get it, but at the same time I should say that a majority of the management in this country did not feel so.

First Ideas in Standard Overhead

Then about that time (ten years ago, I should say) we began to get our first ideas in the use of standard overhead or burden. Up to that time I remember when Franklin and I started determining costs back some twenty years ago up in New England, we used what we called a moving average burden rate. It makes no difference how we were applying the burden, whether on the basis of a machine hour or a labor hour, or as a percentage of direct labor cost. Each month we added on the figures for the last month and dropped the figures for the thirteenth month back, which meant we had an average which represented the conditions in the business for the past twelve months—what we called a moving average.

That began to iron out some of these peaks and valleys that exist in actual historic cost, where they go up and down, depending on rates of production. Well, then, it became rather general to use a standard or predetermined overhead, a normal burden, I think, was the general term that we applied to it. We began to compare the actual burden as it occurred, not so much the use of it, but the actual percentage with this normal. That was the first gleam that we had of this idea of standard cost and from that—I say we—I am speaking of myself and a number of other professional engineers, cost engineers, such men as my partners, Charter Harrison and J. P. Jordan, Mr. Scovell and his partners in the Scovell-Wellington organization—some of the men in actual plant practice. We began to develop the idea of what we have now come to call standard cost, which is briefly an attempt to build up costs on a prophetic basis rather than on a historic basis. It is an attempt to say in advance what the cost should be under certain definite assumed conditions. We must make those assumed conditions as nearly right as we can. We will discuss that a little more as to what the assumed conditions will be, but broadly speaking the idea was that we would try to predetermine cost.

We wouldn't build our cost and our determination of values on past records, but we would sit down and put down on paper what we thought the cost should be, based on all of the knowledge we had of past records, of what we knew as to how the plant should be operated, of what we knew of the usual normal percentage of capacity operation in the industry, if we were able to deal with the industry as we were through a number of our trade associations, or from the point of view of the individual plant, if there was no association to gain that knowledge through.

Enabled Three Things To Be Done

That immediately enabled us to do three things, the precise three things, which management had complained we did not do. In the first place, we were able to present a figure which represented a level normal cost on which our sales department was able to base its selling policy. It enabled us to separate very sharply and clearly the difference between the percentage of profit or loss, which is the profit that the sales department makes, based on the normal or standard cost and the factory operating gains or losses, which is the difference that the factory makes between the standard cost and the actual cost that prevails at the time the goods are manufactured, which are not inherent factors of value. It enabled us to bring out control figures. It gave us a measuring stick which we were able to put into the hands of the superintendents and the men who ran the plants. We gave them something definite to measure their performance against, so that we could express their performance in terms of percentages of efficiency, of percentages of gains or losses in the different divisions into which these gains or losses divide themselves and finally we found that this method of handling costs was very much simpler from a clerical standpoint.

It meant, in a complicated plant, where standard cost methods were installed, a reduction of at least 50 per cent in the personnel of their cost department and in the cost of operating the cost department. The same thing worked out in the case of a number of other large and complicated plants. It worked out, not to perhaps so great a percentage of saving, but with an appreciable percentage of saving, in smaller plants with less complicated lines.

Marked a Great Development

This marked a very great development, but it has not yet become general practice. I should say that at the present time outside of the paper industry perhaps 20 percent of our larger and better run plants are operating on this basis. It was a curious thing from any point of view to see this gradual shift in the way in which this cost work was handled from the more or less theoretical standpoint of the old line cost men, and by that I include myself and Franklin in the days when we were doing it that way, into harmony with the point of view of the practical man. I remember when I was a boy growing up in Buffalo, N. Y., my father bought the patents for an electric cloth cutting machine, which my family has always manufactured since, and my father was simply a practical man, something of a mechanic, something of a factory superintendent. He had no cost system. He had no detailed method of keeping track of what happened down in the plant. It was not a big plant. We employed some fifty or sixty men. Father filled up every scrap of paper that lay around the house, the backs of envelopes and the backs of bills that we used to have around the house at that time, and various other scraps of paper with calculations as to what these cutting machines of his ought to cost him. After he figured out the cost to his own satisfaction, what they ought to cost him, then he went out and sold them on what he thought was the right price. What he was doing there was making up for himself a predetermined or standard cost. At the end of the year he took his inventory and determined how much he made or lost and figured out how many machines he had sold and how much profit or loss he had made on the average per machine and checked that up against the figures he had made at the beginning of the year to see how nearly right he was. He made a success out of the business, not big money, but fair money for those days.

Reconciling the Point of View

As time has gone on my brothers and myself have applied these advanced methods to this business and there was no question as to the difference in result that you get by getting down to the detailed control and all that, but this gradual swing around of the cost engineering point of view to using predetermined costs is simply a bringing together, a reconciling of the point of view, of the practical manufacturer, with the more or less theoretical accountant. It is surprising how effectively this plan is working out in these other industries that I tell you about.

It so happens that in my own practice I have not had very much paper mill work in the last three or four years. I have had quite a lot of work in converting plants. I have handled the cost work for the folding box and the label and lithographic industries in this country and I have handled the cost work and am still handling it for those industries and also for the envelope manufacturing industry. I have had one or two paper mill experiences in the last four years.

In my opinion, gentlemen, I don't know of any industry that lends itself better to this method of using predetermined or standard costs than the paper mill industry, the manufacturers of all kinds and grades of paper. There is no industry in which costs fluctuate more definitely and rapidly with the rate of operation than they do in the paper industry. If you are able to run your mill 100 per cent full you get very low costs. If, owing to lack of businesss or other conditions in your sales department, you find your rate of operation cut down to 50 per cent, your cost is going up very tremendously. Of course, you also have a very clear

cut separation in your paper mill industry between your conversion cost and your furnish cost, your furnish cost remaining more or less stationary, subject only to the fluctuations of the various stocks which you put into your furnish, your conversion cost fluctuating up and down with the rate of operation, with the rate of production, that is, the speed at which you run your beating equipment and your machines and the actual economy and care with which the money is spent.

It is a perfectly simple matter in a paper mill to take these different factors of cost and after you determine what represents the normal, usual rate of operation of your mill, to build up a predetermined or standard cost for every grade of paper, every weight of paper that you want to run out of that mill, and that can be further standardized as to the various standard finishing costs in the various finishes, the various packings and the various ways in which you want to put the finished paper out to the trade. The selling, distributing and administrative costs also lend themselves to standardization in exactly the same way.

Also Building a Budget

At the same time that you are building these predetermined costs right down to the detail for the different grades and weights, you are also building a budget which gives you a definite mark to shoot at from the point of view of all your expenditures and which finally enables you to build up financial budgets which will prove at least a mark to strive for and as an inherent probability as to what your financial condition will be at the end of various months, which will enable you to predetermine what your financial and banking requirements are going to be.

Of course, this question of working out predetermined budgets is not a tremendously important thing for mills that have plenty of working capital of their own and that are not forced to avail themselves of banking credit. I know that there are some mills, that find themselves in that very enviable position. But for any mill that from time to time has to go into the market and supplement its own capital with borrowed capital, which has to draw on its credit resources to carry either a stock of raw materials or a stock of finished goods over peak load periods, the predetermination of a financial budget (which shows what your financial requirements are going to be at the end of each month during the year, so that you can go to your banks at the beginning of the year and show them your whole financial program for the year), is of the utmost practical value.

The building up of the operating budget on which the standard cost is based, is a comparatively simple matter. The first thing to determine is what is the normal percentage of activity that you can reasonably expect over a period of years for your particular mill. That varies with different industries. I think there is no breach of confidence to say that in the envelope industry, which I have handled for the last eight years, we find that as a whole in that industry, our rate of operation, expressed in terms of our capacity, has been less than 60 per cent. The highest percentage of operation to capacity, that we have ever gotten, was 64 per cent. The lowest we have ever gotten was 43 per cent, which we did in the disastrous year of 1921.

In the envelope industry, then, we budget at 60 per cent of capacity. We assume that our envelope plant will operate year in and year out at 60 per cent of its capacity. That means that in good years we will operate on a basis that will show us a saving, an operating gain. We may credit that directly to profit and loss, or it may be carried as a reserve account against the poor years, which we get in every industry.

In Good Position To Know Average Rate

We find, for instance, in the folding box and label and lithographic industries that an average percentage of expectancy in those industries is about 80 per cent.

I think that through the various associations that you have in the paper industry, certainly in the groups whose statistics I am familiar with, such as the writing paper group, whose statistics Mr. Naylor is furnishing, you gentlemen are in a very excellent position to know what the average rate of production is to capacity in your industry and what it can reasonably be expected to be.

Of course, there you bring in the question of whether from the point of view of the individual mill they are willing to accept the experience of the industry and build up their budget and predetermine costs on the basis of the industry experience, or whether they want to build it up on the basis of their own experience. I would say that probably under present conditions one would have to take one's own individual situation into consideration and build one's budget based on one's own experience. At least, until our trade associations come to the point where they are willing to act together in that matter.

There will be a certain question of the legal jurisdiction of doing that. At the same time it would be from a very broad point of view a wonderful thing if we could recognize that for an industry as a whole. I am just having a very interesting experience of that in our flour mill industry which I have just taken up and we have worked out a uniform method of cost determination for the milling industry in this country.

We find that the milling industry as an average work only 56 per cent of the capacity of the mills and the industry has gone on record as a whole as saying that broadly speaking milling costs should be figured on the basis of 60 per cent of mill operating capacities. But from the point of view of the individual mill we are not yet able to bring that about. What we are doing there, as we go in these different mills, we are working out a budget on a basis of 60 per cent, and then we are also working out a budget on the basis of the mill's own actual average past performance in consultation with the mill manager. Those actual budgets have gone as high as 80 per cent basis. Some mills have gone as low as a 35 per cent basis and some other mills have only been able to operate a certain part of the year owing to their location in relation to source of wheat supply.

Proper Percentage Would Vary

Practically speaking, I should say that in the paper industry in its present state the proper percentage of capacity to use would vary with the different groups. I think some of your groups are closely enough lined up where you could adopt a group percentage. I don't want to say what those groups are. You men know that very much better than I, but there are some groups where you could adopt a normal percentage as a group matter. There are others of your groups where that would be clearly out of the question at the present time, where each individual company would have to work out its own percentage. That is the first thing to determine, then, on what basis you are going to budget. It may be that you would want to make more than one budget. That is perfectly possible. That is, it is perfectly possible to work out a budget on the basis of sixty per cent of capacity, on the basis of seventy per cent capacity, on the basis of eighty per cent capacity, on the basis of ninety per cent capacity and on the basis of one hundred per cent capacity, and take that into consideration in determining your price and policy, remembering of course, also that as you lower prices, if by any chance you should be tempted to do it, below the current market level, competition is going to also lower prices. In other words, there is no chance of any individual mill permanently getting more than its normal percentage of the business that is being placed throughout the country through price depreciation. There is so much paper business flowing up and down and that is going to continue to divide itself between the mills in about a certain percentage, because if one mill lowers its prices, competition will do the same thing, But from the point of view of your pricing policy, it is often very helpful to have these budgets worked out on these different rates of production. If you have done that and determined where your pricing policy is going to be, where you are going to fit in on the pricing scale, then make your final determination as to what rate you are going to assume as normal for your mill.

The Next Thing To Do

The next thing is to take all of the factors which enter into the conversion cost. I don't know that I am using conversion cost in the sense that you gentlemen do, but by conversion cost I mean every element of cost that enters into the operation of a paper mill with the exception of the money that is spent for stock that goes into the furnish and money that is spent for selling and distributing the product which I think should be dealt with as outside of the conversion cost. I think the conversion cost should bring the paper up to the shipping room door and include every factor of expense that would be incurred, if you turned your entire production over at that point, as some mills do, to a converting plant which would take your entire production with no selling expense incurred whatever.

The next step is to take every factor of cost that enters into this conversion cost, beginning, of course, with the fixed charges, setting down the proper depreciation costs, the proper interest charges, the estimated tax charges, (with the exception of income taxes), and the insurance charges and then making an equitable distribution of those fixed charges over the different divisions into which you divide your mill. Those divisions broadly speaking are: first of all, a proper charge for the raw stock storage in handling. It costs money to bring stock into a mill. It costs money to store and handle it. It requires space, warehouse insurance and all of those things. Every element of expense that is incurred in the handling of raw materials should be included in this budget and a standard cost per ton or whatever basis you determine to use, perferably per ton, for handling the storage of raw materials, should be added to the cost of raw materials at the time that we charge it up to the "furnish."

Next we come to our beaters and there should be a section of this budget devoted to the beater cost, bringing out exactly what the fixed charges are against beaters. There should then be for the various machines, a sheet budget for each of the machines, or, if your machines are exactly alike, where you can regard two or three of them as a unit, they can be grouped. Preferably, however, I think by individual machines in most mills where there are seldom over one or two identical machines.

Finally, a budget for the finishing department divided into such divisions as your finishing department may have. Some of us have very simple finishing departments, where it is simply a matter of reeling the stuff up on a roll and shipping it out. Others of us have sheeting and sizing and coating and various other collateral finishing departments. All of these must have budgets developed for them. The first thing is to get the proper allocation of the fixed charges to each of these centers.

Then we take each of the other items of expense, taking the distributive items, such as building charges, developing a cost per foot of floor space, developing the cost of our power, working it out on a standard budget, treating it just as we would a separate power plant, bringing out a standard cost per kilowatt hour, per horsepower hour, per hundred pounds of steam evaporated, if we are using steam, getting a division of the amount of steam charge and power charge. This we charge to the paper machines and to the beaters and other parts of our plant.

Nothing Complicated About It

That sounds like a complicated matter but you gentlemen all do that or will have to do that anyway. There is nothing complicated about it. It is just a predetermination of all of these, a working out of them in advance and then, finally, having all of these divisions with the budget figures set up, assigning to each department the supervision of labor and the maintenance, the supply items and finally the direct labor expense that you spent in those departments.

So that finally each of your departments or divisions, whichever you please to call them, has a complete statement of the money we expect to spend in operating during the year. We then work that down to so much per month or so much per week. We can take a four-week period or we can take four-week months and five-week months, (we have to make a distinction between them) or we can bring it down to a weekly period.

Then we take the number of hours that we have determined will represent normal. If we are operating a paper machine which has a production, a possible number of hours working on a three-tour basis, of 144 hours a week and we say that we think eighty per cent of capacity is normal for that particular mill, we take eighty per cent of our 144, about 115 and we bring out a cost per hour for each of our machines, a cost per hour for each of our various divisions in our beaters, a cost per hour for the different departments in the finishing, although the finishing department can be expressed as a standard percentage of burden to labor rather than a cost per hour, if you perfer to do it.

Conversion Cost Standardized

You now have the conversion cost standardized and worked out into the cost of the time elements or the percentage elements. Then it becomes a question of preparing a grade card, a furnish card for each of the different grades of paper which you are going to run, setting down the standard furnishes and the standard cost of those furnishes plus the storage and handling charges at the time that you make the determination. Of course, that can't remain standard throughout the year. Small variations in purchase price of stock can be absorbed through a purchase price variation, but those furnish standards should be charged from time to time as the basic price of pulp, or rags, or mixed papers, or clippings, or whatever it is you are using, changes.

In making up that furnish card you make proper allowances for shrinkage and loss in the beaters and as it goes over the machines. Then you put down for each of these grades, you are going to make, your estimate of what the standard beating time is going to be. You then work out the standard rate, at which you expect to pull that stuff over the machines, taking into consideration the grades and the weight and the speers, at which you have standardized your paper machines. These speeds may not be exactly standard, but you have a certain speed that you expect to run. You may have to, in actual practice, vary up or down. That will determine one of your variations, which we will presently examine.

So that finally we have worked out for each of our different grades a standard furnish, a standard furnish cost and a standard rate of production in the various departments, beaters, machines and such finishing departments as it is going through. You may have basic cards which bring the paper off the end of the machine and then subsidiary cards or records for the various finishing operations.

Then you attack the selling and distribution costs in the same way and prepare definite standard estimates of the amount of money you are going to spend on selling and determine the method of distribution that you are going to use for distributing that over your different grades of paper. It may be distributed—I won't attempt to go into that; that is another subject, of course—on a ton basis. It may be distributed as a percentage of the total selling price or it may (as I am inclined to think is a little better in paper mill practice) be distributed on the basis of the conversion cost, which represents what you are really trying to sell.

Basis For Sales Department

These standards having been made up, this becomes the basis on which your Sales Department determines its selling policy and the basis on which the performance of the Sales Department is measured. Their profit or loss, the commercial profit or loss, is measured by the profits or losses which the Sales Department makes when it sells this paper, reduced by the gain or loss the Sales Department has made against its standard allowed selling expense.

Down in the factory day by day, we get the furnish gains or losses, the difference between the actual stuff that we have put in, that may be due to inability to furnish the exact kind of

stock to the beater room that we want to furnish. We may be wanting to make a certain run of paper and may not have exactly the sort of furnish that we want. We may have to vary that. We may have careless men in the beater room who don't put the stuff in exactly as ordered. We may run into extraordinary losses in the beaters, or get bad conditions on the machine that make a lot more difficulty than we anticipated.

We bring out then a furnish gain or loss broken down into such detail, as we want to have. We get each day a record of the production on the different grades and we get a gain or loss due to variations, between the actual rates of production and the standard rates of production, and at the end of the week, we get a labor gain or loss, the difference between the actual labor, that we have expended, and the labor that we have budgeted. At the end of the accounting period, we get our burden gain or loss divided into the gain or loss, due to over or under capacity operation, and the gain or loss, due to over or under expenditure, and the gain due to over or under efficiency of operation.

In other words, the factory gain or loss, broken down into these various factors, makes a complete picture of what has happened out in the various divisions of the mill during the period that it has been operated. So that in a very simple way, with considerable less clerical work than I think is otherwise involved, we get a complete control and we get a very much better basis of determining selling policy and measuring the performance of our Sales Department.

Of course, I realize that is a tremendously sketchy and inadequate presentation of the subject, but it gives you an idea I think of what this standard cost method is and how in my opinion it can be applied practically and simply and with very great advantage to the operation of the paper mills, in which you are all interested. I hope that we can have a little discussion on the matter. I am sure that some of you men here are using that method. If you are, I think it would be interesting to hear your experiences with it. If you have any questions that I can possibly answer I will be glad to do so and I thank you for listening to me so patiently.

Discussion

PRESIDENT SCOTT: I am sure we all thank Mr. Stevenson for his very clear talk. As he said he would be very glad to hear any questions from anybody.

QUESTION: You base your standards on previous performances, don't you?

MR. STEVENSON: Not wholly. Of course, you have got to take previous performances into consideration, but we find that in building these budgets, if you make a detailed study of just what the best possible conditions are, if you bring your superintendents and your various foremen in, we find that generally speaking, you can get a budget that will represent a standard that will represent an appreciable gain over past performances.

We find, as we build these budgets, that right there in the building of the budgets, you generally take a very appreciable amount of operating cost out of the mill. I haven't had a big experience of that sort to quote to you in a paper mill recently, but I have had one or two in a very big plant down in Bridgeport, a very efficiently run plant, mostly piece work, yet when they came to build up that budget, they were able to take out of their indirect labor, an excessive supervision cost and poorly organized maintenance crews, where the maintenance crews were not delivering as they should and the foremen were not making the check that they should have on the use of the maintenance money of their departments, over $100,000 a year in actual operating costs.

I have found that, that is true, in nearly every mill where I have seen these budgets worked out. It is a combination of the application of past performance with your own judgment and the judgment of the men in your organization, as to how that job can be done better and cheaper. It led to a reconsideration of every man's job, of the work that every man is doing, of the necessity of having him—and I don't mean just the clerical force, but I mean the yard gangs and handling gangs and maintenance men and all of those things that build up our costs so enormously in a paper mill—perform his work more efficiently.

QUESTION: Do you carry the difference between your predetermined costs and your actual costs to your individual grades?

MR. STEVENSON: No, I do not. That is a very broad question. Personally, I prefer to carry all of my variations directly to my profit and loss account with the exception of my "material" cost variation. My material price variation I prefer to carry to the grade cost. I think that it is a true differential in value. But I don't believe that a difference in conversion cost or in rate of operation is a true cost against the grade or an expense of a true grade value. I think that this is a general over-efficiency or under-efficiency of the mill itself, which should not either penalize or be a benefit to the particular grade. That is a debatable point. I debated that at great length and not only in the paper industry but in all industries.

QUESTION: Don't you think that there are some executives that are rather against using the profit and loss account in a broad way as you do, when charging the differences between your actual and predetermined costs, to profit and loss?

MR. STEVENSON: I think at first thought they are, until they get an idea of what this plan really means and until you can get the picture of real value before them. When I get down to discussing that, with a man with whom I am working, I try to reduce these things to the most simple statement of a case that I can get, something that would just affect that man and myself. I just say to this man, for instance, "supposing you and I are operating a printing press; we buy a printing press and spend so much money for it and put it here in this room and hire a man to run it for us. We will say we are not able to sell successfully and all we get over a month's run on that press is one order of ten thousand catalogues. If we attempt to charge everything that is involved in keeping that press sitting here in this room; the interest that it is eating up; the rent of the room; the hired man we have got to look after; the power we have engaged for it; if we attempt to charge all that to that order of catalogues, it means that we shall get a cost of these catalogues of probably ten or fifteen dollars apiece. That is absurd. Anybody, who would attempt to inventory or take values or think of things in those terms can see immediately, it is not correct. Their contention carried to its ultimate conclusion is unfair. That is what they are contending for. What really happened is that, that order of catalogues has come in, been run over the press in about ten hours, and the catalogues have cost us perhaps five or six cents apiece, which is a true cost and a true value for inventory purposes, a true value to sell against, a true value for every purpose. The rest of the money we have spent is absolutely a flat loss, which comes out of such little profit as we made on the catalogues. Isn't that a logical presentation of it?

QUESTION: The point is, that we predetermine our costs on grades of paper in the manner you have outlined but instead of charging it in a broad sense to profit and loss, or crediting profit and loss, we adjust our costs to an actual basis. That is, each grade of paper shows the predetermined cost and also the actual cost, which the organization that I represent, seem to want to have.

MR. STEVENSON: It is simply the hang-over, the natural conservatism that we all have in our minds when we have been accustomed to doing a thing in a certain way. It is an awful wrench for us, to try to do it some other way, and that is a perfectly natural reaction on their part. I don't think it gets them anywhere. It involves them in a lot of needless clerical work. I think it really gives them a false inventory. I think that bankers and people, who study statements, are coming more and more to feel that inventories based on predetermined costs, are a truer ex-

pression of value, than having these variations carried back into cost.

QUESTION: The only inventory that it really would affect would be a manufactured paper inventory. Your other inventories wouldn't be touched at all.

MR. STEVENSON: There are a lot of businesses where it is vitally important. Take for instance the rubber business, the rubber tire business, where you build up stocks of tremendous sizes, of finished tires in your own factory and scattered around in your various branches, and on consignment to dealers and all that. You run into a low production period in the tire business and throw that variation due to low production into the cost of these figures for inventory purposes; you can see from a banking standpoint you can inflate, leaving out the question of rubber entirely, a tire inventory ten to fifteen per cent and present it to the bank and the value isn't there.

QUESTION: You stated that you felt that a variation in price in furnish materials represented a legitimate value and that any variation should be put into the cost of manufactured goods—how do you feel about a quantity variation?

MR. STEVENSON: No, I don't think so. I think a quantity variation is accidental and not particularly inherent to a particular grade and is a thing that should be borne out of the profits or losses, whether it is a gain or a loss. Of course, if there is a particular grade that we know is going to take an excessive amount of furnish and have an excessive amount of loss on it, that should be taken into consideration in building up a standard. If you are trying to run a very thin paper which you know is going to make a tremendous amount of "broke," that should be given different standard of production and different standard of weight than heavy paper that you know is going to run over fairly comfortably.

QUESTION: I am inclined to disagree with you on that price variation basis, because I think that in the paper industry it is possible to a great degree to predetermine prices on raw materials, for a fairly definite period in advance.

MR. STEVENSON: I think under present conditions it is, but if you had a pretty widely fluctuating market, I think what I personally would do, would be to change my standards, my furnish standards, rather rapidly.

QUESTION: In the paper industry it might be necessary to do that, at least once a year, and at most I should say three times a year; so in that case your price variations on materials wouldn't be so bad, but what would you consider a variation from standard?

MR. STEVENSON: If I were running a board mill and mixed papers were selling at fourteen, I would standardize on mixed papers at fourteen dollars, then if mixed papers went up to fifteen or down to thirteen, I wouldn't change; but if mixed papers went up to the seventeen or eighteen level, I would change my standard. If they dropped down to ten or eleven, I would change my standard also.

QUESTION: And yet that very point will be strongly contested by some men probably in this room, a great many of them.

MR. STEVENSON: I can see that it might be; it is a debatable point.

QUESTION: Is there any tendency to change the accounting period in taking care of this over or unabsorbed burden? For instance, I heard it advocated recently that over or unabsorbed burden should not be charged to profit and loss once a year, but later, on a sort of a "business cycle" basis. Has that idea made much headway?

MR. STEVENSON: I don't think so. It has been discussed but most people want to close it out. There is no objection, of course, to carrying a reserve, to setting aside part of that profit as a reserve against bad years, instead of carrying it into your surplus. For instance, this year nearly all the rubber companies are carrying very heavy reserves against rubber depreciation that is inventory depreciation and setting up a definite reserve and not carrying it to their surplus at all. That is all it amounts to. It is a question of whether you carry it over into surplus or put it up as a reserve.

QUESTION: You mentioned the fact about distribution of your selling expense, which seems to be causing quite some discussion in the company which I represent and I just want to touch on that a minute. You did not mention the fact, though, that the selling of your different grades of paper may vary, that is the percentage of selling. Shouldn't that appear or enter into the basis when you prorate your selling expenses over your cost?

MR. STEVENSON: Very much more than we do at the present time. If you are selling different grades which go to different markets, then there should be different divisions of your sales expense and if you are selling part of your paper, as many of your mills do, through branch houses, some of it going out through jobbers, some of it going out directly to converters, there should be different selling expenses for these different classes of sales. For instance, I had a very clear-cut case just the other day in a textile plant. They were making laces and were using a flat percentage of selling price. They were selling all over the country. When we came to analyze their selling expenses we found that the sales out west of Denver, out through that sparsely settled coast territory, were costing them up as high as thirty per cent and the sales here in the New York district were costing them only seven per cent. Their average was about fourteen. It stands to reason that they were actually losing money on every sale that they made out west of the Mississippi. As soon as we had made that analysis, we let about twenty-eight salesmen go. We just decided to forego that volume. That reduced our rate of operation but the loss that we got through that, was nothing like the gain that we got through saving this lost selling expense. I am absolutely with you on that point, viz, that we should all analyze and work out our selling expenses more carefully for different classes of goods, for different territories and different classes of trade, but irrespective of how fine that division is, there is still a consideration of whether the basis will be total cost, whether it will be selling price, or whether some of you may think well of the suggestions I have made of using conversion cost as the basis for prorating this expense.

We are using conversion cost as the base in a number of the converting industries. We are using conversion cost in folding boxes, in labels. We have harmonized with the United Typothetae for the whole graphic arts industry. The lithographers are basing it on conversion costs and I am basing it on conversion costs in envelopes. I think it is a truer expression. Any method of distributing selling expense is merely an approximation. I mean there is no absolutely accurate method of measuring it without going into the cost per salesman hour and all that sort of thing, but I think conversion cost comes nearer representing the right basis of approximation after we have made different figures for the different classes of trades and territories than the other methods.

QUESTION: We are working along the lines of conversion cost on that, but we haven't worked into the difference in selling the different grades of paper, but I just mention that fact because I had it in mind and I thought it was important.

MR. STEVENSON: I think it is a very important thing. You take the mills that we deal with, mills that sell us envelope paper, it is perfectly evident their cost in selling is entirely different from what it is to go out and sell to the printing trade through a branch house as some of them do or even to sell through jobbers. You have a paper that is selling, say an envelope paper, around seven dollars a hundred, $140 dollars a ton. Out of $140 roughly speaking, I suppose forty dollars is conversion cost and the balance is furnish and selling cost and profit. You would express that as a percentage of forty dollars instead of as a percentage of $140.

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Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING MARCH 13, 1926

SUMMARY

Cigarette paper .....2190 cs.
Wall paper .....59 bls., 165 rolls
Paper hangings .....72 bls., 5 cs.
News print .....389 rolls
Printing paper .....306 bls., 50 rolls, 88 cs.
Wrapping paper .....49 bls., 53 cs.
Pergamyn paper .....9 cs.
Filter paper .....33 bls., 20 cs.
Note paper .....486 bls.
Envelopes .....3 cs.
Colored paper .....12 cs.
Surface coated paper .....120 cs.
Flintstone paper .....80 bls.
Garnet paper .....11 bls.
Jacquard paper .....3 cs.
Tissue paper .....18 cs.
Decalcomania paper .....11 cs.
Writing paper .....66 cs.
Fancy paper .....22 cs.
Cellophane paper .....9 cs.
Letter paper .....4 cs.
Drawing paper .....3 cs.
Tracing paper .....1 cs.
Paper tubes .....61 cs.
Stationery .....6 cs.
Straw board .....497 rolls
Miscellaneous paper .....48 pgs., 53 cs.

CIGARETTE PAPER

Kaufman Bros. & Bondy, La Bourdonnais, Bordeaux, 2 cs.
Equitable Trust Co., Laura C., Trieste, 6 cs.
P. J. Schweitzer, Pres. Polk, Marseilles, 26 cs.
Standard Products Corp., Schodack, Havre, 171 cs.
R. J. Reynolds Tobacco Co., Collamer, St. Nazaire, 560 cs.
De Manduit Paper Corp., Collamer, St., Nazaire, 325 cs.
American Tobacco Co., Collamer, Bordeaux, 1100 cs.

WALL PAPER

H. Reeve Angel & Co., Inc., Gustavsholm, Raumo, 165 rolls.
W. H. S. Lloyd & Co., Carmania, Liverpool, 15 bls.
F. J. Emmerich, Carmania, Liverpool, 7 bls.
F. J. Emmerich, Andania, Hamburg, 16 bls.
Hudson Freight Fdg. Co., Andania, Hamburg, 13 bls.
F. A. Binder, Bremen, Bremen, 8 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., Menominee, London, 5 cs.
W. H. S. Lloyd & Co., Menominee, London, 7 bls.
W. H. S. Lloyd & Co., American Farmer, London, 52 bls.
A. C. Dodman, Jr., Inc., Celtic, Liverpool, 13 bls.

NEWS PRINT

H. Reeve Angel & Co., Inc., Gustavsholm, Raumo, 389 rolls.

PRINTING PAPER

Caxton Laboratories, La Bourdonnais, Bordeaux, 2 cs.
R. Wilson Paper Co., Jessmore, Leith, 40 cs.
C. Steiner, N. Amsterdam, Rotterdam, 7 cs.
Miller & Wright Paper Co., N. Amsterdam, Rotterdam, 7 cs.
Parsons & Whittemore, Inc., Gustavsholm, Helsingfors, 178 bls.
H. Reeve Angel & Co., Inc., Gustavsholm, Raumo, 44 bls.
H. Reeve Angel & Co., Inc., Gustavsholm, Raumo, 50 rolls.
Titan Shipping Co., Majestic, Havre, 27 cs.
Maurice O'Meara Co., Bergesfjord, Gothenburg, 84 bls.
International Fdg. Co., Suvier, Antwerp, 5 cs.

WRAPPING PAPER

F. C. Strype, Anaconda, Rotterdam, 41 cs.
Bernard, Judae & Co., Samland, Antwerp, 12 cs.
Armour & Co., Collamer, Bordeaux, 49 bls.

BERGAMYN PAPER

F. C. Strype, Andania, Hamburg, 9 cs.

FILTER PAPER

A. Giese & Son, La Bourdonnais, Bordeaux, 19 bls.
G. Luedera & Co., La Bourdonnais, Bordeaux, 4 bls.
H. Reeve Angel & Co., Inc., Menominee, London, 12 cs.
H. Reeve Angel & Co., Inc., American Farmer, London, 8 cs.
J. Manheimer, Celtic, Liverpool, 10 bls.

NOTE PAPER

A. Goodman, Celtic, Liverpool, 486 bls.

ENVELOPES

A. Goodman, Celtic, Liverpool, 3 cs.

COLORED PAPER

E. Daiber, Eastern Victor, Antwerp, 5 cs.
Borden, Riley Paper Co., Samland, Antwerp, 7 cs.

SURFACE COATED PAPER

H. D. Catty Co., Andania, Hamburg, 5 cs.
P. C. Zuhlke, Samland, Antwerp, 115 cs.

FLINTSTONE PAPER

United Hardware & Tool Co., Bremen, Bremen, 80 bls.

GARNET PAPER

United Hardware & Tool Co., Bremen, Bremen, 11 bls.

JACQUARD PAPER

Susquehanna Silk Mills, Bremen, Bremen, 3 cs.

TISSUE PAPER

Standard Products Corp., Schodack, Havre, 18 cs.

DECALCOMANIA PAPER

Palen Bros. Decalcomania Co., N. Amsterdam, Rotterdam, 1 cs.
H. A. Weiss, Andania, Hamburg, 4 cs.
L. A. Consmiller, Bremen, Bremen, 6 cs.

WRITING PAPER

E. Dietzgen & Co., Hellen, Marseilles, 16 cs.
N. Y. Blue Print Paper Co., Hellen, Marseilles, 25 cs.
Coenca, Morrison & Co., Majestic, Havre, 4 cs.
Guibout freres, Majestic, Havre, 12 cs.
F. Loeser & Co., Schodack, Havre, 9 cs.

FANCY PAPER

Whiting & Patterson Co., Majestic, London, 22 cs.

CELLOPHANE PAPER

Du Pont Cellophane Co., Majestic, Havre, 9 cs.

LETTER PAPER

Distinctive Writing Paper Co., Majestic, Havre, 4 cs.

DRAWING PAPER

H. Reeve Angel & Co., Inc., American Farmer, London, 3 cs.

TRACING PAPER

Phoenix Shipping Co., Andania, Hamburg, 1 cs.

PAPER TUBES

H. de Maguinn, Samland, Antwerp, 61 cs.

STATIONERY

Shaw-Walker Co., Randsfjord, Bergen, 6 cs.

STRAW BOARD

A. Vuyk, W. Amsterdam, Rotterdam, 497 rolls.

MISCELLANEOUS PAPER

Heemsoth, Basse & Co., N. Amsterdam, Rotterdam, 48 pgs.
P. H. Petry & Co., N. Amsterdam, Rotterdam, 10 cs.
F. C. Strype, Hellen, Marseilles, 3 cs.
Japan Paper Co., Majestic, London, 4 cs.
Favor, Ruhl & Co., C. Rosso, Genoa, 3 cs.
T. Solberg, Randsfjord, Bergen, 3 cs.
H. de Maguinn, La Savoie, Havre, 5 cs.
Coenca, Morrison & Co., La Savoie, Havre, 15 cs.
Japan Paper Co., La Savoie, Havre, 10 cs.

RAGS, BAGGINGS, ETC.

The Stone Bros. Co., Inc., Eastern Victor, Antwerp, 102 bls. bagging.
The Stone Bros. Co., Inc., Eastern Victor, Antwerp, 34 bls. rags.
Mechanics & Metals Natl. Bank, Eastern Victor, Antwerp, 204 bls. rags.
R. M. Gray, Eastern Victor, Antwerp, 85 bls. flax waste.
Whaling Waste Products Co., Eastern Victor, Antwerp, 93 bls. jute card waste.
Whaling Waste Products Co., Eastern Victor, Antwerp, 96 bls. bagging.
Royal Manfg. Co., Eastern Victor, Antwerp, 47 bls. bagging.
M. Suedeker Corp., Jessmore, Belfast, 67 bls. rags.
C. R. Spence, Jessmore, Belfast, 50 bls. rags.
Philadelphia Natl. Bank, Liberty Land, Naples, 36 bls. rags.
P. Berlowitz, Anaconda, Rotterdam, 556 bls. rags.
W. Steck & Co., Anaconda, Rotterdam, 140 bls. jute waste.
E. J. Keller Co., Inc., Anaconda, Rotterdam, 2 bls. rags.
Brown Bros. & Co., Braga, Alexandria, 45 bls. rags.
National Bank of Commerce, Braga, Alexandria, 61 bls. rags.
A. A. Waler, Braga, Alexandria, 340 bls. rags.
Maurice O'Meara Co., N. Amsterdam, Rotterdam, 103 bls. bagging.
Second National Bank of Boston, N. Amsterdam, Rotterdam, 385 bls. rags.
G. M. Graves Co., N. Amsterdam, Rotterdam, 139 bls. rags.
Castle & Overton, Inc., N. Amsterdam, Rotterdam, 63 bls. rags.
The Stone Bros. Co., Inc., N. Amsterdam, Rotterdam, 78 bls. rags.
Marx Maier Paper Mill Supply Co., N. Amsterdam, Rotterdam, 68 bls. bagging.
American Woolstock Corp., N. Amsterdam, Rotterdam, 93 bls. rags.
E. J. Keller Co., Inc., N. Amsterdam, Rotterdam, 100 bls. rags.
Amsinck, Sonne & Co., Inc., Celtic, Liverpool, 63 bls. rags.
Castle & Overton, Inc., Celtic, Liverpool, 6 bls. bagging.
National Bank of Commerce, Hellen, Marseilles, 85 bls. rags.
Mechanics & Metals Natl. Bank, Hellen, Marseilles, 106 bls. rags.
L. H. Abenheimer, Hellen, Alexandria, 198 bls. rags.
Equitable Trust Co., Hellen, Barcelona, 75 bls. rags.
Castle & Overton, Inc., Hellen, Barcelona, 137 bls. bagging.
National Bank of Commerce, Timavo, Leghorn, 239 bls. rags.
E. J. Keller Co., Inc., Timavo, Genoa, 45 bls. bagging.
Mechanics & Metals Natl. Bank, Laura C., Venice, 254 bls. rags.
Baring Bros. & Co., Cameronia, Glasgow, 113 bls. rags.
A. W. Fenton, Inc., Cameronia, Glasgow, 41 bls. rags.
Central Natl. Bank & Trust Co., Cameronia, Glasgow, 57 bls. rags.
J. Munro & Co., Cameronia, Glasgow, 144 bls. rags.
Brown Bros. & Co., Cameronia, Glasgow, 45 bls. bagging.
I. Minsky, Andania, Hamburg, 6 bls. rags.
E. J. Keller Co., Inc., Andania, Hamburg, 280 bls. rags.
E. J. Keller Co., Inc., Andania, Hamburg, 54 bls. bagging.
Mechanics & Metals Natl. Bank, Andania, Hamburg, 137 bls. rags.
Philadelphia Natl. Bank, Andania, Hamburg, 387 bls. rags.
State Bank, Andania, Hamburg, 280 bls. bagging.
G. W. Millar & Co., Andania, Hamburg, 97 bls. rags.
G. M. Graves Co., Andania, Hamburg, 62 bls. rags.
L. H. Abenheimer, Andania, Hamburg, 36 bls. rags.
Darmstadt, Scott & Courtney, Verbania, London, 9 bls. rags.
Irving Bank-Columbia Trust Co., Bremen, Bremen, 60 bls. bagging.
Mechanics & Metals Natl. Bank, Bremen, Bremen, 135 bls. rags.
Mechanics & Metals Natl. Bank, Bremen, Bremen, 52 bls. baggings.
Solomon Bros. & Co., Bremen, Bremen, 78 bls. rags.
New York Trust Co., Bremen, Bremen, 21 bls. rags.
A. W. Fenton, Inc., Lituania, Danzig, 564 bls. rags.
Brown Bros. & Co., Suevier, Antwerp, 218 bls. rags.
Castle & Overton, Inc., Suevier, Antwerp, 20 bls. rags.
E. J. Keller Co., Inc., Suevier, Antwerp, 199 bls. rags.
Royal Manfg. Co., Suevier, Antwerp, 18 bls. rags.
W. Schall & Co., Suevier, Antwerp, 27 bls. new cuttings.
Irving Bank-Columbia Trust Co., Suevier, Antwerp, 63 bls. bagging.
Old Colony Trust Co., Suevier, Antwerp, 54 bls. bagging.

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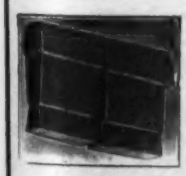

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COTTON WASTE :: LINTERS :: RAMIE

Imports of Paper and Paper Stock

(Continued from page 68)

H. J. Kane, Hoxie, Manchester, 65 bls. picker waste.
Patterson Natl. Bank, Hoxie, Manchester, 40 bls. rags.
Vacuum Co., Hoxie, Manchester, 102 bls. bagging.
Mechanics & Metals Natl. Bank, Hoxie, Manchester, 110 bls. rags.
R. F. Downing & Co., Hoxie, Manchester, 47 bls. rags.
L. H. Abenheimer, Hoxie, Manchester, 71 bls. rags.
L. H. Abenheimer, Hoxie, Manchester, 67 bls. bagging.
J. J. Patricof, Schodack, Havre, 107 bls. bagging.
D. M. Hicks, Schodack, Havre, 60 bls. rags.
Atterbury Bros., Inc., Schodack, Havre, 137 bls. rags.
Atterbury Bros., Inc., Schodack, Havre, 82 bls. bagging.
P. Berlowitz, Schodack, Havre, 231 bls. rags.
S. Silberman, Schodack, Havre, 88 bls. rags.
J. M. Jaffe, Schodack, Havre, 144 bls. rags.
V. Galaup, Schodack, Havre, 157 bls. bagging.
E. Mayer, Schodack, Havre, 7 bls. rags.
Mechanics & Metals Natl. Bank, Schodack, Havre, 38 bls. rags.
C. J. Webb, Schodack, Havre, 30 bls. rags.
Royal Manfg. Co., Schodack, Dunkirk, 162 bls. cotton waste.
Maurice O'Meara Co., Schodack, Dunkirk, 16 bls. thread waste.
Salomon Bros. & Co., Schodack, Dunkirk, 172 bls. flax waste.
R. Bishop Manfg. Co., Schodack, Dunkirk, 180 bls. rags.
National City Bank, Schodack, Dunkirk, 100 bls. rags.
Maurice O'Meara Co., Samland, Antwerp, 66 bls. burlaps.
Brown Bros. & Co., Samland, Antwerp, 18 bls. rags.
Brown Bros. & Co., Samland, Antwerp, 17 bls. thread waste.
Whitaker & Co., Samland, Antwerp, 27 bls. rags.
Baring Bros. & Co., Samland, Antwerp, 205 bls. rags.
Kidder, Peabody Accep. Corp., Samland, Antwerp, 12 bls. thread waste.
Chemical Natl. Bank, Samland, Antwerp, 198 bls. rags.
Spoulding Fibre Co., Samland, Antwerp, 645 bls. flax waste.
Andrews & Cook, Samland, Antwerp, 95 bls. flax waste.
The Stone Bros. Co., Inc., Collamer, St. Nazaire, 21 bls. rags.
Goldman, Sachs & Co., Collamer, St. Nazaire, 164 bls. rags.
Whaling Waste Products Corp., Collamer, Bordeaux, 61 bls. jute waste.
Katzenstein & Keene, Inc., Collamer, Bordeaux, 66 bls. bagging.
E. J. Keller Co., Inc., Manchuria, Shanghai, 94 bls. rags.

OLD ROPE

New York Trust Co., Jessmore, Leith, 35 coils.
W. Steck, Bremen, Bremen, 14 bls.
W. Steck, N. Amsterdam, Rotterdam, 43 coils.
Brown Bros. & Co., N. Amsterdam, Rotterdam, 141 coils, 65 bls.
Brown Bros. & Co., Bergensfjord, Oslo, 46 coils.
Brown Bros. & Co., Francisco, Hull, 234 coils.
Brown Bros. & Co., Wells City, Bristol, 171 coils.

MANILA ROPE

Ellermans' Wilson Line, American Farmer, London, 142 coils.
New York Cordage Co., Samland, Antwerp, 142 coils.

WOOD PULP

Castle & Overton, Inc., Anaconda, Rotterdam, 852 bls. wood pulp, 168 tons.
M. Gottesman & Co., Inc., N. Amsterdam, Rotterdam, 1300 bls. wood pulp.
Bulkley, Dunton & Co., N. Amsterdam, Rotterdam, 280 bls. wood pulp.
Perkins, Goodwin & Co., Bergensfjord, Oslo, 250 bls. sulphite pulp.
E. M. Sergeant & Co., Bergensfjord, Oslo, 475 bls. chemical pulp.
Buck, Kiaer & Co., Inc., Bergensfjord, Oslo, 800 bls. kraft pulp.
Buck, Kiaer & Co., Inc., Bergensfjord, Hommelvik, 2400 bls. sulphite pulp.
Tidewater Papermill Co., Bornholm, Liverpool, N. S., 10,206 bls. wood pulp.
Bulkley, Dunton & Co., Andania, Hamburg, 600 bls. wood pulp.
Scandinavian Pulp Agency, Inc., Sulina, Stockholm, 4000 bls. wood pulp, 508 tons.
Bulkley, Dunton & Co., Sulina, Gothenburg, 500 bls. sulphite, 101 tons.
Scandinavian Pulp Agency, Inc., Sulina, Gothenburg, 1524 bls. kraft pulp, 304 tons.
J. Anderson & Co., Randsfjord, Sarpsborg, 3537 bls. sulphite pulp.
Nilsen, Lyon & Co., Randsfjord, Gothenburg, 300 bls. sulphite pulp, 50 tons.

WOOD PULP BOARDS

Lagerloef Trading Co., Gustavsholm, Helsingfors, 536 bls.

WOOD FLOUR

B. L. Soberski, Bergensfjord, Frederikstad, 900 bags.
B. L. Soberski, Randsfjord, Frederikstad, 1418 bags.
Composition Materials Co., Randsfjord, Flekkefjord, 800 bags, 40,400 kilos.

CASEIN

Atterbury Bros., Inc., Vestris, Buenos Aires, 1667 bags.
Karolith Corp., Collamer, Bordeaux, 7 bags.
National City Bank, West Keene, Buenos Aires, 834 bags, 50,040 kilos.

BALTIMORE IMPORTS

WEEK ENDING MARCH 13, 1926

Scandinavian Pulp Agency, Inc., Sulina, Stockholm, 3000 bls. wood pulp.
Scandinavian Pulp Agency, Inc., Sulina, Gothenburg, 1778 bls. kraft pulp.
Johanson, Wales & Sparre, Inc., Sulina, Gothenburg, 897 bls. dry soda pulp.
E. M. Sergeant & Co., Sulina, Gothenburg, 598 bls. dry soda pulp.
E. M. Sergeant & Co., Sulina, Gothenburg, 483 bls. sulphite pulp.
Castle & Overton, Inc., Sulina, Gothenburg, 203 bls. sulphite pulp.
Parsons & Whittemore, Inc., Sulina, Gothenburg, 1200 bls. sulphite pulp.
Bulkley, Dunton & Co., Sulina, Gothenburg, 2000 bls. sulphate pulp.
E. J. Keller Co., Inc., Breedyk, Karlsruhe, 1201 bls. wood pulp.
Castle & Overton, Inc., Westpool, Germany, 1001 bls. wood pulp.

PORTLAND, ME., IMPORTS

WEEK ENDING MARCH 13, 1926

J. Anderson & Co., Laura C., Trieste, 5735 bls. wood pulp, 1147 tons.

BOSTON IMPORTS

WEEK ENDING MARCH 13, 1926

E. J. Keller Co., Inc., Thames Maru, Hamburg, 44 bls. rags.

PHILADELPHIA IMPORTS

WEEK ENDING MARCH 13, 1926

Castle & Overton, Inc., Bellepline, Rotterdam, 429 bls. wood pulp.
Castle & Overton, Inc., Westpool, Hamburg, 3362 bls. wood pulp.
Castle & Overton, Inc., Kermit, Hamburg, 265 bls. wood pulp.
Castle & Overton, Inc., Kermit, Hamburg, 10 bls. rags.
Castle & Overton, Inc., Westpool, Hamburg, 73 bls. rags.
Castle & Overton, Inc., Southwestern Mills, London, 54 bls. waste paper.
Bulkley, Dunton & Co., Eastern Victor, Rotterdam, 892 bls. wood pulp, 192 tons.
Baltimore Trust Co., Eastern Victor, Rotterdam, 44 bls. rags.
American Woolstock Corp., Eastern Victor, Rotterdam, 8 bls. rags.
Castle & Overton, Inc., Eastern Victor, Rotterdam, 930 bls. wood pulp, 156 tons.
A. W. Fenton, Inc., Eastern Victor, Rotterdam, 310 bls. rags.
D. I. Murphy, Eastern Victor, Antwerp, 82 bls. rags.
A. W. Fenton, Inc., Eastern Victor, Antwerp, 134 bls. rags.
Brown Bros. & Co., Eastern Victor, Antwerp, 2 cs. paper.
S. Specter & Co., Jessmore, Belfast, 32 bls. rags.
J. Scott & Son, Jessmore, Dundee, 30 bls. bagging.
National City Bank, Jessmore, Leith, 31 bls. bagging.
National City Bank, Jessmore, Leith, 24 bls. rags.
Brown Bros. & Co., Jessmore, Leith, 118 bls. rags.
Congoleum Co., Hellen, Marseilles, 354 bls. rags.
A. W. Fenton, Inc., Hellen, Marseilles, 331 bls. rags.
National City Bank, Timavo, Smyrna, 470 bls. rags.
D. I. Murphy, Timavo, Smyrna, 98 bls. rags.
Philadelphia Natl. Bank, Timavo, Leghorn, 138 bls. rags.
D. I. Murphy, Timavo, Oran, 444 bls. rags.
D. I. Murphy, Collamer, Bordeaux, 485 bls. rags.
Castle & Overton, Inc., Collamer, Bordeaux, 834 bls. rags.
Baltimore Trust Co., Collamer, Bordeaux, 221 bls. rags.
Castle & Overton, Inc., Collamer, St. Nazaire, 543 bls. rags.
A. W. Fenton, Inc., Collamer, St. Nazaire, 121 bls. rags.
G. S. Harlan, Wells City, Bristol, 300 bags china clay.
J. A. Steer & Co., Wells City, Bristol, 72 bls. rags.
E. J. Keller Co., Inc., Hornfels, Bremen, 63 bls. rags.
E. J. Keller Co., Inc., Fenchurch, Barcelona, 175 bls. rags.
E. J. Keller Co., Inc., Oakspring, Mannheim, 11 bls. rags.
E. J. Keller Co., Inc., Blydendyk, Rotterdam, 115 bls. rags.
E. J. Keller Co., Inc., Blydendyk, Amsterdam, 127 bls. rags.
E. J. Keller Co., Inc., Bellepline, Mannheim, 71 bls. rags.
E. J. Keller Co., Inc., Bellepline, Rotterdam, 355 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING MARCH 13, 1926

Castle & Overton, Inc., Effna, Germany, 44 bls. rags.
Castle & Overton, Inc., Cranford, Antwerp, 156 bls. rags.

Paper Mills in Brazil

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 10, 1926.—Latest statistics report 20 mills with a combined production of 52,600 metric tons of paper annually now in operation in Brazil. Nearly one-half (20,000 tons) of the total output is produced in the 7 mills located in the state of Sao Paulo. Rio de Janeiro, which has 3 mills with a total production of 8,600 tons ranks second as a paper manufacturing center, followed by Minas Geraes with 4 mills producing 4,600 tons. The remainder is manufactured by the 2 mills in Panama, and 1 each in the states of Pernambucco, Rio Grande do Sul, and Santa Catharina. The greater part of the output from those mills consists of wrapping paper, with appreciable quantities of cheap writings, and some bond and kraft papers.

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LATEST MARKET REVIEW

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, March 17, 1926.

Conditions in the local paper market are about normal for the time of the year, and the demand for the various grades is fairly satisfactory. Sales forces of the leading paper houses are enjoying a busy spring campaign, and further expansion is anticipated in the trade from now on until after the Easter season. Prices are reported to be holding up very well, and there is very little prospect of concessions being made for some time.

News print continues in steady demand, and consumption is increasing fast enough to absorb the increased production. It is estimated by the News Print Service Bureau that the United States mills made 11 per cent more news print in the first two months of 1926 than in the corresponding period of 1925, and that the Canadian mills manufactured 16 per cent more than in the first two months of 1925.

The combined production of the United States and Canadian mills in the first two months of 1926 was 13 per cent greater than in the same period of the previous year. Stocks of news print in the United States mills totalled 14,791 tons at the end of February, and at the Canadian mills 13,500 tons, making a combined total of 28,291 tons, which was equivalent to 2.5 days average production.

Demand for the various grades of paper board is persistent, and the tone of the market is quite firm. The fine paper market continues active, and a good volume of orders are being received from the printers. The coarse paper market is in an excellent position, and prices are very firm. With the approach of Easter, more interest is being taken in the wrapping paper market, and the demand is steadily expanding.

Mechanical Pulp

The ground wood market continues to exhibit a firm tendency. and a particularly heavy request is being experienced from the news print manufacturers at the present time. Offerings in the spot market are still rather scarce, but the demand has been quite sufficient to absorb accumulations. Prices are practically unchanged. Scandinavian ground wood is quoted at from $40 to $45 a ton, ship side, while Canadian and domestic ground wood is selling at from $30 to $33, f.o.b., pulp mill.

Chemical Pulp

Steadiness continues to prevail in the chemical wood pulp market, and prices are being well maintained at the recently quoted high levels. Both domestic and foreign wood pulp mills are reported to be well sold ahead. Imported kraft is very strong at from 3.25 to 3.50, ship side, while domestic kraft is selling at from 3.00 to 3.50, f.o.b., pulp mill. Foreign strong unbleached sulphite No. 1 is very firm at from 3.15 to 3.35, ship side, Atlantic ports.

Old Rope and Bagging

An improved demand is being experienced for domestic old rope, and prices are holding up very well. Foreign rope is in rather slow request at the time of writing. The bagging market is slightly easier and the demand is below normal at present. Burlap is in fair request, although prices of the various grades are inclined to fluctuate.

Rags

Observers of the rag market are inclined to be more optimistic than of late. The movement of white rags has expanded somewhat and roofing rags are also arousing more interest. No radical changes have been reported in the quotations for rags and the market is exhibiting a sound tendency. Stocks of imported rags in the hands of the dealers are said to be light and rather fancy prices are being asked.

Waste Paper

More spirited interest is being taken in the waste paper market than of late, and a better buying movement is anticipated in the near future. The lower grades of waste paper are in specially good request from the board mills, and, should the demand increase materially, higher prices may be looked for. Old kraft has been fairly active, and soft white shavings are in better request.

Twine

Due to the increased demand for wrapping paper for spring and Easter requirements the twine market is displaying a healthy tone. Prices are holding up very well and the future outlook for the industry is very bright.

Hinde & Dauch to Build at Trenton

In reference to the new strawboard mill, which the Hinde & Dauch Paper Company of Canada will erect at Trenton, Ont., O. H. Moore, Toronto, Canadian manager of the company, states that work will begin in the spring, a site of 25 acres having been secured in Trenton, between the C. N. R. and the C. P. R. tracks on the east side of the river, on what is known as the old chemical plant property. Two buildings will be erected, one about 300 feet long and 2½ stories high, for the straw cookers, and another 500 feet long, one story high, for the paper machine. The structures will be of concrete, steel and brick. Th capacity of the plant will be 50 tons per day, wheat straw being used in the making of the product.

The Hinde & Dauch Paper Company's plant, which has been established in Toronto for the past 16 years, has been securing all its straw board from various plants of the company across the border. The object of the erection of th new mill at Trenton is to supply the Toronto unit.

German Print Paper on Reparations Account

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 15, 1926.—The Association of German Printing Paper Factories, and the Union of "Non-Trust" News Print Paper Factories, are negotiating with French interests about the delivery of 6,000 cars of print paper on account of reparations, according to the European division of the Department of Commerce.

The French government has secured an import quota of print paper to the amount of 70,000 tons, and it is reported that the negotiations are on the point of being concluded.

The Russian Soviet trade representation is endeavoring at the present time, to place important orders with the German print paper industry. The negotiations have not yet led to a concrete result as the German industry is not in a position to grant the payment terms requested by the Russians.

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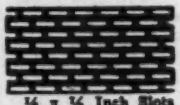

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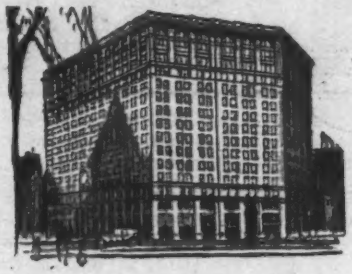

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Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, March 17, 1926.

Trading in the local chemical market was fairly active during the past week, although most of the sales were in small quantities for immediate use. Contract withdrawals have been heavy, and, with few exceptions, prices have been well maintained. Manufacturing operations are reported to be expanding, and shipments are expected to be heavy during the latter part of the month.

BLANC FIXE.—In the blanc fixe market, new business was rather scarce last week. Shipments on contracts placed early in the year were in good demand. No change in prices was reported. The pulp is still selling at from $60 to $64 a ton, in bulk, and the powder at from 3¾ to 4½ cents a pound, car lots, at works.

BLEACHING POWDER.—The bleaching powder market continues to exhibit a firm tendency. Contract withdrawals have been excellent, and production is quite heavy enough to take care of immediate requirements. Prices remain practically unchanged. Bleaching powder is quoted at from $2 to $2.40 per 100 pounds, in large drums, at works.

CAUSTIC SODA.—Leading manufacturers of caustic soda report an increased demand. The bulk of the contract business is already closed, and prices are being well maintained at the recently quoted basis. Shipments of caustic soda against contract are proceeding at a satisfactory pace. Quotations on caustic soda range from $3.10 to $3.15 per 100 pounds, at works. Spot car lots are quoted at from $3.20 to $3.25 per 100 pounds.

CASEIN.—Due to the present off-season in production, the prices of both domestic and foreign casein have been advanced half a cent from the recently quoted level. The demand for this product is fairly persistent for this time of the year. Domestic casein is now selling at from 12½ to 14½ cents a pound, according to grade, and imported casein at from 14 to 14½ cents a pound, all in bags.

CHINA CLAY.—The china clay market was fairly active during the past week. Contract deliveries were in excellent volume, and no price changes were recorded. Offerings were rather limited, and spot trading was below normal. Domestic washed clay is quoted at $8 a ton, at mine, and pulverized at $10 a ton. Imported china clay is quoted at from $13 to $22 a ton, ship side.

CHLORINE.—Demand for chlorine is steady and persistent. Contract shipments of this product are moving in excellent volume. It is reported that manufacturers of chlorine are well sold ahead. The quotation on chlorine is still 4 cents a pound, in tanks or multi-unit cars, at works, on contract orders. The spot quotation is about half a cent higher.

ROSIN.—More interest is being taken in rosin by the paper mills, and the market is somewhat firmer. Contract withdrawals are moving in good volume, and prices are holding up well. At the naval stores, paper makers' grades of rosin are now being quoted at from $12.25 to $14 per 280 pounds, ship side, in barrels.

SALT CAKE.—The salt cake market continues in a strong position. A steady movement of salt cake against contract is being experienced by the manufacturers, and prices are being well maintained. Salt cake is now selling at from $17 to $20 a ton, in bulk, at works.

SODA ASH.—Activity prevailed in the soda ash market during the week and prices have been well maintained. The leading manufacturers have been moving large shipments against current contracts and the industry appears to be in a very sound condition. Contract quotations, in car lots, at works, per 100 pounds, were as follows: In bulk, $1.25; in bags, $1.38, and in barrels, $1.63.

STARCH.—The starch market is firmer, due to the increased production costs, following higher grain prices, and the advances of the previous week are being well sustained. Despite the higher prices, consumers are taking on supplies in good volume. Special paper makers' starch is still selling at $3.32 per 100 pounds, in bags, and $3.49 in barrels.

SULPHATE OF ALUMINA.—Demand for sulphate of alumina continues along routine lines, and the bulk of the movement in this market consists of shipments on contract to the paper mills. Accumulations are ample, and manufacturers express their ability to take care of any further expansion. Sulphate of alumina is quoted at from $2 to $2.05 per 100 pounds, for the iron free, in bags, at works, in car lots, and at from $1.40 to $1.45 for commercial grades.

SULPHUR.—The sulphur market is in a sound position, and the demand for this product is steadily expanding. Contract withdrawals are proceeding in a satisfactory manner, and prices are being well maintained. The quotation on sulphur is unchanged at from $14 to $15 a ton, in bulk, at mine, and at from $20 to $21 a ton, ship side.

TALC.—Conditions in the talc market are normal for this period of the year, and stocks are amply sufficient to take care of prevailing demands. Shipments on contract are moving in good volume and prices are unchanged. Talc is now quoted at from $16 to $18 a ton, at eastern mines, according to grades.

Boston Market is Improving

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., March 15, 1926.—An increased demand for fine papers, a steadier coarse paper market, continued apathy in the paper stock division and somewhat brighter times in the box board branch featured the local paper trade this week. Outside of a general tone of confidence and optimism there was little of outstanding note.

The business has been general and shared by all branches except the raw stock division. This end of the industry has been off for months and those "in the know" say that they see no indications of any radical break in the near future. The printers' demands continue to make inroads into the fine grade merchants' stocks and in this industry there is always something doing.

The season for specialties has arrived and the demand for various innovations in stationery, book papers and other lines is marked. Announcements are in heavy demand and colors are again to the fore in all kinds of writings. Some elaborate, rather high-priced, color stationery is on the market but there seems to be a demand for it. The greeting card men are busy and the coming season looks like a winner.

With business picking up in the various industrial centers and improving in the big stores those dealers handling the coarse paper find plenty of business to care for. Prices remain the same as they did last week in all lines.

The box board men are sharing good business with the coarse division men. Roofing stock took a notable jump this week.

In the raw stock division it is noticed that while the mills are not at all interested in buying stock of any quantity prices show no sign of falling. On the other hand there is a firm steadiness, the same level being maintained for weeks. Occasionally there is a demand for rags which causes a little flurry here and there.

SIR HERBERT HOLT MADE DIRECTOR

Announcement has been made that, at a meeting of the board of directors of the Port Alfred Pulp and Paper Corporation held at Montreal, Que., Sir Herbert S. Holt was added to the board, of which it is understood that he will be chairman. This announcement is particularly interesting in view of rumors of some months' standing to the effect that Port Alfred Pulp and Paper would eventually be linked up with the St. Maurice Valley Corporation. Sir Herbert was recently elected to the presidency of the new St. Maurice Valley Corporation and this new appointment is considered further evidence of his increasing interest in the pulp and paper industry. Sir Herbert's other directorates include the presidency of the Royal Bank of Canada and also of the Montreal Light, Heat and Power, Consolidated.

The financial statement of Port Alfred Pulp and Paper Corporation as at December 31, 1925, just issued, reveals a strong position and indicates that the corporation has made substantial progress